# Connecting via Winsock to STN

```
Welcome to STN International! Enter x:x
LOGINID:ssptasxm1624
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2
* * * * * * * * * *
                       Welcome to STN International
NEWS
                   Web Page for STN Seminar Schedule - N. America
NEWS 2 MAY 01
                   New CAS web site launched
NEWS
      3 MAY 08 CA/CAplus Indian patent publication number format defined
NEWS 4 MAY 14 RDISCLOSURE on STN Easy enhanced with new search and display
                   fields
                   BIOSIS reloaded and enhanced with archival data
NEWS 5 MAY 21
NEWS
       6 MAY 21
                   TOXCENTER enhanced with BIOSIS reload
NEWS
      7 MAY 21
                   CA/CAplus enhanced with additional kind codes for German
                   patents
NEWS 8 MAY 22
                  CA/CAplus enhanced with IPC reclassification in Japanese
                   patents
 NEWS 9 JUN 27
                   CA/CAplus enhanced with pre-1967 CAS Registry Numbers
NEWS 10 JUN 29 STN Viewer now available
NEWS 11 JUN 29 STN Express, Version 8.2, now available
NEWS 12 JUL 02 LEMBASE coverage updated
NEWS 13 JUL 02 LMEDLINE coverage updated
NEWS 14 JUL 02 SCISEARCH enhanced with complete author names
NEWS 15 JUL 02 CHEMCATS accession numbers revised
NEWS 16 JUL 02 CA/CAplus enhanced with utility model patents from China
NEWS 17 JUL 16 CAplus enhanced with French and German abstracts
NEWS 18 JUL 18 CA/CAplus patent coverage enhanced
NEWS 19 JUL 26 USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS 20 JUL 30 USGENE now available on STN
NEWS 21 AUG 06 CAS REGISTRY enhanced with new experimental property tags
NEWS 22 AUG 06 BEILSTEIN updated with new compounds
NEWS 23 AUG 06 FSTA enhanced with new thesaurus edition
NEWS 24 AUG 13 CA/CAplus enhanced with additional kind codes for granted
                   patents
NEWS 25 AUG 20 CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS 26 AUG 27 Full-text patent databases enhanced with predefined
                   patent family display formats from INPADOCDB
NEWS 27 AUG 27
                   USPATOLD now available on STN
NEWS 28 AUG 28 CAS REGISTRY enhanced with additional experimental
                   spectral property data
NEWS EXPRESS 29 JUNE 2007: CURRENT WINDOWS VERSION IS V8.2,
                CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0jc(JP),
                AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007.
NEWS HOURS
                STN Operating Hours Plus Help Desk Availability
NEWS LOGIN
               Welcome Banner and News Items
```

For general information regarding STN implementation of IPC 8

NEWS IPC8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 21:45:37 ON 31 AUG 2007

=> FIL REGISTRY COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 21:45:45 ON 31 AUG 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 30 AUG 2007 HIGHEST RN 945894-95-1 DICTIONARY FILE UPDATES: 30 AUG 2007 HIGHEST RN 945894-95-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\Stnexp\Queries\10524995.str

chain nodes :

10 12 19 20 25 29 31 32 33 34

ring nodes :

1 2 3 4 5 6 7 8 9 14 15 16 17 18

chain bonds :

4-10 6-12 7-20 8-25 14-29 15-31 16-32 16-33 18-19 19-20 33-34

ring bonds :

1-2 1-6 2-3 2-7 3-4 3-9 4-5 5-6 7-8 8-9 14-18 14-15 15-16 16-17 17-18

exact/norm bonds :

G1:H,O,S,N,C1,Br,F,I,CH3

G2:X,C,Cy,OH,S,N

G3:C,N

G4:H,OH,CH3

G5:H,Cl,Br,F,I,OH,CH3

G6:H,O,S,CH3,OH,X

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 12:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS 20:CLASS 25:CLASS 29:Atom 31:CLASS 32:CLASS 33:CLASS 34:CLASS

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STF

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> d 11

L1 HAS NO ANSWERS

L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> sl1 sam

SL1 IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> s 11 sam

SAMPLE SEARCH INITIATED 21:46:37 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 805 TO ITERATE

100.0% PROCESSED

805 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS:

14398 TO 17802

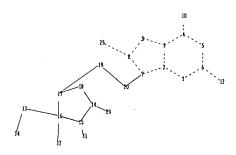
PROJECTED ANSWERS:

0 TO 0

L2 0 SEA SSS SAM L1

=>

Uploading C:\Program Files\Stnexp\Queries\10524995a.str



chain nodes :

10 12 19 20 25 29 31 32 33 34

ring nodes :

1 2 3 4 5 6 7 8 9 14 15 16 17 18

chain bonds :

4-10 6-12 7-20 8-25 14-29 15-31 16-32 16-33 17-19 19-20 33-34

ring bonds :

1-2 1-6 2-3 2-7 3-4 3-9 4-5 5-6 7-8 8-9 14-18 14-15 15-16 16-17 17-18

exact/norm bonds :

G1:H,O,S,N,C1,Br,F,I,CH3

G2:X,C,Cy,OH,S,N

G3:C,N

G4:H,OH,CH3

G5:H,Cl,Br,F,I,OH,CH3

G6:H,O,S,CH3,OH,X

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 12:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS 20:CLASS 25:CLASS 29:Atom 31:CLASS 32:CLASS 33:CLASS 34:CLASS

L3 STRUCTURE UPLOADED

=> d 13

L3 HAS NO ANSWERS

L3

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s 13 sam

SAMPLE SEARCH INITIATED 21:48:06 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED -

805 TO ITERATE

100.0% PROCESSED

805 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

\*\*COMPLETE\*\* BATCH

PROJECTED ITERATIONS:

14398 TO 17802

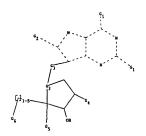
PROJECTED ANSWERS:

0 TO

L40 SEA SSS SAM L3

=>

Uploading C:\Program Files\Stnexp\Queries\10524995b.str



chain nodes :

10 12 19 23 25 26 27 28 33

ring nodes :

1 2 3 4 5 6 7 8 9 14 15 16 17 18

chain bonds :

4-10 6-12 7-33 8-19 14-23 15-25 16-26 16-27 17-33 27-28

ring bonds :

1-2 1-6 2-3 2-7 3-4 3-9 4-5 5-6 7-8 8-9 14-18 14-15 15-16 16-17 17-18

exact/norm bonds :

1-2 1-6 2-3 2-7 3-4 3-9 4-5 4-10 5-6 6-12 7-8 7-33 8-9 8-19 14-18

14-15 14-23 15-16 15-25 16-17 16-26 16-27 17-18 17-33 27-28

isolated ring systems :
containing 1 : 14 :

G1:H,O,S,N,Cl,Br,F,I,CH3

G2:X,C,Cy,OH,S,N

G3:C,N

G4:H,OH,CH3

G5:H,Cl,Br,F,I,OH,CH3

G6:H,O,S,CH3,OH,X

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 12:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS 23:Atom 25:CLASS 26:CLASS 27:CLASS 28:CLASS 33:Atom

L5 STRUCTURE UPLOADED

=> d 15

L5 HAS NO ANSWERS

L5

STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s 15 sam

SAMPLE SEARCH INITIATED 21:49:31 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 116 TO ITERATE

100.0% PROCESSED 116 ITERATIONS

١

o to tibleath

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS:

1674 TO 2966

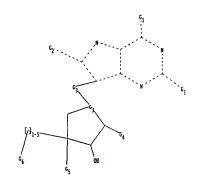
PROJECTED ANSWERS:

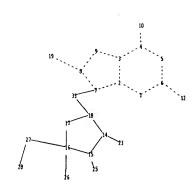
0 TO 0

L6 0 SEA SSS SAM L5

=>

Uploading C:\Program Files\Stnexp\Queries\10524995c.str





chain nodes :

10 12 19 23 25 26 27 28 33

ring nodes :

1 2 3 4 5 6 7 8 9 14 15 16 17 18

chain bonds :

4-10 6-12 7-33 8-19 14-23 15-25 16-26 16-27 18-33 27-28

ring bonds :

1-2 1-6 2-3 2-7 3-4 3-9 4-5 5-6 7-8 8-9 14-18 14-15 15-16 16-17 17-18

exact/norm bonds :

1-2 1-6 2-3 2-7 3-4 3-9 4-5 4-10 5-6 6-12 7-8 7-33 8-9 8-19 14-18

14-15 14-23 15-16 15-25 16-17 16-26 16-27 17-18 18-33 27-28

isolated ring systems : containing 1 : 14 :

G1:H,O,S,N,C1,Br,F,I,CH3

G2:X,C,Cy,OH,S,N

G3:C,N

G4:H,OH,CH3

G5:H,Cl,Br,F,I,OH,CH3

G6:H,O,S,CH3,OH,X

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 12:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS 23:Atom 25:CLASS 26:CLASS 27:CLASS 28:CLASS 33:Atom

L7 STRUCTURE UPLOADED

=> d 17

L7 HAS NO ANSWERS

STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s 17 sam

SAMPLE SEARCH INITIATED 21:50:46 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 116 TO ITERATE

100.0% PROCESSED 116 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS:

1674 TO 2966

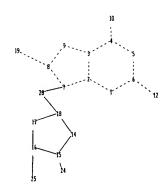
PROJECTED ANSWERS:

0 TO

 $^{18}$ 0 SEA SSS SAM L7

=>

Uploading C:\Program Files\Stnexp\Queries\10524995d.str



chain nodes :

10 12 19 24 25 28

ring nodes :

1 2 3 4 5 6 7 8 9 14 15 16 17 18

chain bonds :

4-10 6-12 7-28 8-19 15-24 16-25 18-28

ring bonds :

1-2 1-6 2-3 2-7 3-4 3-9 4-5 5-6 7-8 8-9 14-18 14-15 15-16 16-17 17-18

exact/norm bonds :

14-15 15-16 15-24 16-17 16-25 17-18 18-28

isolated ring systems :
containing 1 : 14 :

G1:H,O,S,N,Cl,Br,F,I,CH3

G2:X,C,Cy,OH,S,N

G3:C,N

G4:H,OH,CH3

G5:H,Cl,Br,F,I,OH,CH3

G6:H,O,S,CH3,OH,X

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 12:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS 24:CLASS 25:CLASS 28:Atom

L9 STRUCTURE UPLOADED

=> d 19

L9 HAS NO ANSWERS

STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s 19 sam

SAMPLE SEARCH INITIATED 21:51:51 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 165 TO ITERATE

100.0% PROCESSED

165 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS:

2530 TO 4070

PROJECTED ANSWERS:

O TO

L10

0 SEA SSS SAM L9

Uploading C:\Program Files\Stnexp\Queries\10524995z.str

chain nodes : 10 12 14 18 ring nodes :

1 2 3 4 5 6 7 8 9

chain bonds :

4-10 6-12 7-18 8-14



### 10524995.trn

ring bonds :

1-2 1-6 2-3 2-7 3-4 3-9 4-5 5-6 7-8 8-9

exact/norm bonds :

1-2 1-6 2-3 2-7 3-4 3-9 4-5 4-10 5-6 6-12 7-8 7-18 8-9 8-14

isolated ring systems :

containing 1 :

G1:H,O,S,N,Cl,Br,F,I,CH3

G2:X,C,Cy,OH,S,N

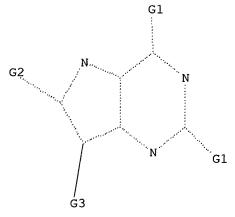
G3:C,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 12:CLASS 14:CLASS 18:CLASS

L11 STRUCTURE UPLOADED

=> d 111 L11 HAS NO ANSWERS L11 STR



G1 H,O,S,N,Cl,Br,F,I,Me G2 X,C,Cy,OH,S,N G3 C,N

Structure attributes must be viewed using STN Express query preparation.

=> s 111 sam

SAMPLE SEARCH INITIATED 21:53:52 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 1105 TO ITERATE

100.0% PROCESSED 1105 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01

50 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 20106 TO 24094 PROJECTED ANSWERS: 1486 TO 2714

L12 50 SEA SSS SAM L11

=> s 111 full

FULL SEARCH INITIATED 21:54:00 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 22594 TO ITERATE

100.0% PROCESSED 22594 ITERATIONS 1989 ANSWERS

SEARCH TIME: 00.00.01

L13 1989 SEA SSS FUL L11

=> fil capl

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 177.95 178.16

FILE 'CAPLUS' ENTERED AT 21:54:04 ON 31 AUG 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 31 Aug 2007 VOL 147 ISS 11 FILE LAST UPDATED: 30 Aug 2007 (20070830/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> s 113

L14 67 L13

=> s 114 and (py>2004 or ay>2004 or pry>2004)

3526671 PY>2004

652472 AY>2004

496281 PRY>2004

=> s 114 and (py<2004 or ay<2004 or pry<2004) 23934638 PY<2004 4740271 AY<2004

```
4222276 PRY<2004
L16
       60 L14 AND (PY<2004 OR AY<2004 OR PRY<2004)
=> s l16 not (2007/so or 2006/so or 2005/so or 2004/so r 2003/so)
       525553 2007/so
       876632 2006/so
       876648 2005/so
      847842 2004/SO
1499 SO/SO
       369433 R/SO
       781328 2003/so
            0 2004/SO R 2003/SO
               ((2004(W)SO(W)R(W)2003)/SO)
L17
           60 L16 NOT (2007/SO OR 2006/SO OR 2005/SO OR 2004/SO R 2003/SO)
```

=> d 116 ibib hitstr abs 1-60

L16 ANSWER 1 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:
DOCUMENT NUMBER:
117LE:
117LE:
218CF ARCHIVENTOR(S):
218CF ARCHIVENTOR(S):
218CF ARCHIVENTOR(S):
218CF ARCHIVENTOR(S):
220021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
230021
2

riroko
Teijin Pharma Limited, Japan PCT Int. Appl., 419 pp.
CODEN: PIXXD2
Patent
Japan-PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2005019219 A1 20050303 WO 2004-JP12692 20040826 <--\$019219 A1 20050303 W0 2004-0F12692 20040826 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, II, II, II, II, SI, JP, KE, KG, KF, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MY, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZY, SBY, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZY, AM, ZB, SY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TD, TG
2065975 A1 20050303 AU 2004-266975 20040826 RV: EE, E3, S1, SK, TR, BF, bu, S1, SK, TR, TG

AU 2004266975 A1 20050303 CA 2004-2536887

US 200515399 A1 20050714 US 2004-928600

FR 1661897 A1 20060531 EP 2004-728660

R: AT, BE, CH, DE, DX, ES, FR, GB, GR, IT, LI, LU, S1

US 2006160831 A1 20060720 US 2004-928969

BR 2004013821 A 20061024 BR 2004-138210

CH 1871240 A 20061129 CN 2004-928969

KX 20067A02001 A 20060129 CN 2004-90031450

DRITY APPLN. INFO::

US 2006-6702001 A 200606924 NO 2006-539

KX 2006FA02001 A 200606924 NO 2006-539

KX 2006FA02001 A 20060692 MX 2006-672001

US 2004-909071P US 2004-560013P

US 2003-459071P US 2004-560013P

US 2003-459071P US 2004-560013P 20040826 <--20040826 <--20040826 <--20040826 <--NL, SE, MC, PT, 20040826 <--20040826 <--20040826 <--20060202 <--20060221 <--20030826 <--PRIORITY APPLN. INFO .: 20040330 20030902 <--

20040826

WO 2004-JP12692

OTHER SOURCE(S): MARPAT 142:280221

IT 846570-57-8P 846570-58-9P 846570-59-0P 846570-69-1P 846570-76-1P 846570-77-2P 847137-85-3P RESTORAGE SOURCE (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); TMU (Therapeutic use); BIOL (Biological atudy); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (preparation of pyrrolopyrimidinone derivs. as GSK-3 inhibitors)

RN 846570-57-8 CAPLUS

ANSWER 1 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
Carbamic acid, [2-(7-amino-6-cyclopropyl-1,4-dihydro-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

846570-73-8 CAPLUS Acetamide, N-[5-(2-aminoethyl)-6-(3-chloro-2-thienyl)-4,5-dihydro-4-oxo-1H-pyrrolo[3,2-d]pyrimidin-7-yl]-2,2,2-trifluoro-, monohydrochloride (9CI) (CA INDEX NAME)

● HC1

846570-76-1 CAPLUS Carbamic acid, [2-(7-(benzoylamino)-6-(3-chloro-2-thienyl)-1,4-dihydro-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

846570-77-2 CAPLUS
Benzamide, N-(5-{2-aminoethyl})-6-(3-chloro-2-thienyl)-4,5-dihydro-4-oxo-lHpyrrolo[3,2-d]pyrimidin-7-yl}-, monohydrochloride (9CI) (CA INDEX NAME)

L16 ANSWER 1 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Carbamic acid, [2-[7-(aminocarbonyl)-6-(3-chloro-2-thienyl)-1,4-dihydro-4oxo-SH-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI)
(CA INDEX NAME)

846570-58-9 CAPLUS Carbamic acid, [2-[7-(aminocarbonyl)-6-cyclopropyl-1,4-dihydro-4-oxo-5H-pycrolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

846570-59-0 CAPLUS Carbamic acid. [2-[7-amino-6-[3-chloro-2-thienyl]-1,4-dihydro-4-oxo-5H pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester [9CI] [NOEX NAME]

846570-60-3 CAPLUS

ANSWER 1 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

● HC1

847137-85-3 CAPLUS Benzamide, N-[5-{2-aminoethyl}-6-{3-chloro-2-thienyl}-4,5-dihydro-4-oxo-1H-pycrolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

846570-72-7P 846570-74-9P 846570-78-3P 847273-43-2P 847273-44-3P 847273-44-3P 847273-44-3P 847273-45-4P 847273-67-3P 847274-72-0P 847274-72-0P 847274-73-1P 847274-73-2P 847274-73-3P 847274-73-3P 847274-73-3P 847274-89-6P 84727

847274-85-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(preparation of pyrrolopyrimidinone derivs. as GSK-3 inhibitors)
846570-72-7 CAPLUS
Carbamic acid, [2-[6-(3-chloro-2-thienyl)-1,4-dihydro-4-oxo-7[(trifluoroacetyl)amino]-SH-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

846570-74-9 CAPLUS
Benzamide, N-[2-[6-(3-chloro-2-thienyl)-1,4-dihydro-4-oxo-7[(trifluoroacetyl)amino]-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-fluoro[OCI) (CA INDEX NAME)

846570-78-3 CAPLUS Benzamide, N-[6-(3-chloro-2-thieny1)-4,5-dihydro-4-oxo-5-[2-(4-quinazolinylamino)ethyl}-1H-pyrrolo[3,2-d]pyrimidin-7-y1]- (9CI) (CA INDEX NAME)

847273-43-2 CAPLUS Benzamide, N-[2-[7-(benzoylamino)-6-(3-chloro-2-thienyl)-1,4-dihydro-4-SH-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-4-fluoro- (9CI) (CA INDEX NAME)

L16 ANSWER 1 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

847273-60-3 CAPLUS Carbamic acid, [2-[6-[3-chloro-2-thieny1)-1,4-dihydro-4-oxo-7-(trifluoromethyl)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-, l,1-dimethylethyl ester (9CI) (CA INDEX NAME)

847274-71-9 CAPLUS
Carbamic acid, [2-[6-(3-chloro-2-thienyl)-1,4-dihydro-7-methyl-4-oxo-SH-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

847274-72-0 CAPLUS
Carbamic acid, [2-[6-(3-chloro-2-thienyl)-1,4-dhydro-4-oxo-7(phenylmehyl)-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl
ester (9CI) (CA INDEX NAME)

Page 16

L16 ANSWER 1 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

847273-44-3 CAPLUS Carbamic acid, [2-[6-(3-chloro-2-thienyl)-7-ethenyl-1,4-dihydro-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

847273-45-4 CAPLUS Carbamic acid, [2-{6-(3-chloro-2-thienyl)-1,4-dihydro-7-(3-hydroxy-1-propynyl)-4-oxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl}-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 1 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 847274-73-1 CAPLUS
CN Carbamic acid, {2-(6-(3-chloro-2-thienyl)-7-(1E)-1-hexenyl-1,4-dihydco-4-oxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI)
(CA INDEX NAME)

Double bond geometry as shown.

847274-74-2 CAPLUS Carbamic acid, [2-[6-{3-chloro-2-thienyl}-7-ethynyl-1,4-dihydro-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

847274-75-3 CAPLUS Carbamic acid, [2-[6-(3-chloro-2-thienyl)-7-(1-hexynyl)-1,4-dihydro-4-oxo-8H-pycrolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

847274-76-4 CAPLUS Carbamic acid, [2-(7-[(1-aminocyclohexyl)ethynyl]-6-(3-chloro-2-thienyl)-1,4-dihydco-4-oxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-,1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

847274-77-5 CAPLUS Carbamic acid, [2-[6-(3-chloro-2-thienyl]-1,4-dihydro-4-oxo-7-(phenylethynyl)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

847274-78-6 CAPLUS Carbamic acid, [2-[6-(3-chloro-2-thienyl)-7-[{2-fluorophenyl}ethynyl]-1,4-dhydro-4-owo-5H-pyrrolo[3,2-d]pyrimidin-5-yl}ethyl]-, 1,1-dimethylethylethyl ester (9CI) (CA INDEX NAME)

847274-79-7 CAPLUS
Carbamic acid, [2-[6-(3-chloro-2-thleny1)-1,4-dihydro-7-[(4-methoxypheny1)ethyny1]-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-y1]ethyl]-,

L16 ANSWER 1 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) pyridinylethynyl)-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

847274-83-3 CAPLUS Carbamic acid, [2-[7-(3-amino-3-ethyl-1-pentynyl)-6-(3-chloro-2-thienyl)-1,4-dihydco-4-oxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-,1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

847274-84-4 CAPLUS Carbamic acid, [2-[6-(3-chloro-2-thieny1)-7-(cyclohexylethyny1)-1,4-dihydro-4-oxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethylester [9CI) (CA INDEX NAME)

847274-85-5 CAPLUS
Carbamic acid, [2-[6-(3-chloro-2-thienyl)-1,4-dihydro-4-oxo-7[(trimethylailyl)ethynyl)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Page 17

L16 ANSWER 1 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} 0 \\ \text{t-Bu0-C-NH-CH}_2\text{-CH}_2 \\ \\ 0 \\ \text{N} \\ \\ \text{H} \end{array} \begin{array}{c} \text{C1} \\ \text{C2} \\ \text{C} \\ \text{C} \end{array}$$

847274-80-0 CAPLUS Carbamtc acid, [2-[7-[[4-aminopheny1]ethyny1]-6-(3-chloro-2-thieny1)-1,4-dihydro-4-vao-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

847274-81-1 CAPLUS Carbamic acid, [2-[7-[(2-chloropheny1)ethyny1]-6-(3-chloro-2-thieny1)-1,4-dihydro4-xov-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

847274-82-2 CAPLUS Carbamic acid, [2-[6-(3-chloro-2-thieny1)-1,4-dihydro-4-oxo-7-(3-

L16 ANSWER 1 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

846570-56-7 847277-93-4
RL: RCT (Reactant): RACT (Reactant or reagent)
(preparation of pyrcolopyrimidinone derivs. as GSK-3 inhibitors)
846570-56-7 CAPLUS
Carbamic acid. [2-(7-cyano-6-cyclopropyl-1,4-dihydro-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

847277-93-4 CAPLUS Benzamide, N-[2-[6-(3-chloro-2-thienyl)-7-[[(dimethylamino)methylene]amino]-1,4-dihydro-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-fluoro-(9CI)(CA INDEX NAME)

847278-04-0 CAPLUS
Benzamide, N-[2-[4-chloro-6-[3-chloro-2-thienyl)-7[[(dimethylamino)methylene]amino]-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4fluoro-(9CI) (CA INDEX NAME)

GI

$$R^{3}-A^{6}$$
 $R^{2}-A^{5}$ 
 $N$ 
 $NH$ 
 $A^{1}$ 
 $A^{2}-G^{1}-A^{3}-A^{4}-G^{2}$ 
 $NH$ 

AB The title compds. I [Al and A3 each is a single bond or an aliphatic hydrocarbon: A2 and A4 each is a single bond, CO, COO, etc.; G1 is a single bond, alicyclic hydrocarbon, aromatic hydrocarbon, etc.; G2 is hydrogen, an aliphatic hydrocarbon, alicyclic hydrocarbon, aromatic hydrocarbon, etc. A5 is a single bond or NR: R2 is hydrogen, halogeno, an aliphatic hydrocarbon, etc.; A6 is a single bond, NR, CO, etc.; and R3 is hydrogen, halogeno, nitro, a saturated aliphatic hydrocarbon, etc.; R is hydrogen (lower aliphatic hydrocarbon group) are prepared Thus, treatment of

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:182663 CAPLUS
100CUMENT NUMBER: 142:261554
Preparation of pyrrolopyrimidinethione derivatives having GSK-3 inhibitory activity
TSULSHAMIN, Takhaharus Sugiura, Satoshir Koga, Hasahiro: Matsumoto, Yoshiyuki: Ishii, Toshihiro: Nakano, Akira: Unoki, Gen: Sakai, Yuri: Takarada, Reiko: Ogawa, Hiroko

Teijin Pharma Limited, Japan PCT Int. Appl., 274 pp. CODEN: PIXXD2 PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Patent LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.		APPLICATION NO.	
WO 2005019218	A1 20050303	WO 2004-JP12690	20040826 <
W: AE, AG, AL,	AM. AT. AU. AZ.	BA, BB, BG, BR, BW,	BY, BZ, CA, CH,
		DM, DZ, EC, EE, EG,	
		IN, IS, JP, KE, KG,	
		MD, MG, MK, MN, MW,	
		RO, RU, SC, SD, SE,	
		UG, US, UZ, VC, VN,	
RW: BW, GH, GM,	KE, LS, MW, MZ,	NA, SD, SL, SZ, TZ,	UG, ZM, ZW, AM,
AZ, BY, KG,	KZ, MD, RU, TJ,	TM, AT, BE, BG, CH,	CY. CZ. DE. DK.
EE, ES, FI.	FR. GB. GR. HU.	IE, IT, LU, MC, NL,	PL. PT. RO. SE.
		CI, CM, GA, GN, GQ,	
SN. TD. TG	,,,	01, 01, 01, 01, 02,	,,,,
	11 20050714	US 2004-928600	20040026
		EP 2004-772646	
		GB, GR, IT, LI, LU,	NL, SE, MC, PT,
IE, SI, FI,	RO, CY, TR, BG,	CZ, EE, HU, PL, SK	
US 2006160831	A1 20060720	US 2004-928969	20040826 <
PRIORITY APPLN. INFO.:		JP 2003-301022	A 20030826 <
		JP 2004-100022	
		US 2003-499071P	
		US 2003-499071P	
		WO 2004-JP12690	W 20040826

US 2004-56001P P 20040407

OTHER SOURCE(5): MARPAT 142:261554

IT 846570-03-4P 846570-04-5P
RL: PAC (Pharmacological activity): RCT (Reactant): SPN (Synthetic preparation): THU (Therapeutic use): BIOL (Biological study): PREP (Preparation): RACT (Reactant or reagent): USES (Uses) (preparation of pytrolopyrimidinethione derivs. as GSK-3 inhibitors for treatment of diabetes, inflammation, etc.)

RN 846570-03-4 CAPLUS

CN Benzamide, N-(2-16-(3-chloro-2-thienyl)-1.4-dihydro-4-thioxo-7-(trifluoroacetyl): amino)-5H-pyrrolo[3,2-d] pyrimidin-5-yl]ethyl]-4-fluoro-(9CI) (CA INDEX NAME)

L16 ANSWER 1 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
tert-butowy-N-[2-[6-(3-chloro-2-thienyl)-7-iodo-4-owo-3-hydropyrrolo[3,2-d)pyrinidin-5-yl]ethyl]carboxamide with HCl in methanol and 1,4-diowane at
60°C for 2 h gave 5-(2-aminoethyl)-6-(3-chloro-2-thienyl)-7-iodo-3hydropyrcolo[3,2-d]pyrinidin-4-one HCl salt. In an in vitro assay for
GSK-3 (glycogen synthase kinase-3) inhibiting activity, 104 compds. of
this invention showed IC50 values < 20 nM. A formulation is given.

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

846570-04-5 CAPLUS Benzamide, N-(2-[7-amino-6-(3-chloro-2-thienyl)-1,4-dihydro-4-thioxo-5H-pyrcolo[3,2-d] pyrinidin-5-yl]ethyl]-4-fluoro- (9CI) (CA INDEX NAME)

```
846570-05-6P 846570-06-7P 846570-07-8P 846570-015-8P 846570-08-9P 846570-19-0P 846570-15-8P 846570-16-9P 846570-17-0P 846570-18-1P 846570-18-1P 846570-22-FP 846570-22-5P 846570-22-5P 846570-22-5P 846570-22-4P 846570-22-4P 846570-22-4P 846570-22-4P 846570-23-4P 846570-23-4P 846570-30-7P 846570-32-5P 846570-33-4P 846570-33-4P 846570-33-4P 846570-34-2P 846570-34-3P 846570-34-3P 846570-34-3P 846570-34-3P 846570-34-3P 846570-43-3P 8465
```

846570-50-1P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)
{preparation of pyrrolopyrimidinethione derivs. as GSK-3 inhibitors for treatment of diabetes, inflammation, etc.)
846570-05-6 CAPLUS
Benzamide, N-[2-[7-(benzoylamino)-6-(3-chloro-2-thienyl)-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-fluoro- (9CI) (CA INDEX NAME)

Ph-C-NH C1 '
N S CH2-CH2-NH-C

RN 846570-06-7 CAPLUS

Benzamide, N-[2-[6-(3-chloro-2-thienyl)-1,4-dihydro-7[(phenylmethyl)amino]-4-thioxo-5H-pytrolo[3,2-d]pyrimidin-5-yl]ethyl]-4fluoro- (9CI) (CA INDEX NAME)

Ph-CH<sub>2</sub>-NH C1

RN 846570-07-8 CAPLUS
CN Benzamide, N-[2-[6-(3-chloro-2-thienyl)-1,4-dihydro-7[[(phenylamino]oacbonyl]amino]-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5yl]ethyl]-4-fluoro- (9CI) (CA INDEX NAME)

PhNH-C-NH C1

RN 846570-08-9 CAPLUS

Senzamide, N-[2-[6-(3-chloro-2-thlenyl)-7-[(E)[(dimethylamino)methylene]amino]-1,4-dihydro-4-thloxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-fluoro- (9CI) (CA INDEX NAME)

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 846570-16-9 CAPLUS
CN Benzamide, N-[2-[6-(3-chloro-2-thienyl)-1,4-dihydro-7[(hydroxyacetyl)amino]-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4fluoro- (9CI) (CA INDEX NAME)

RN 846570-17-0 CAPLUS
CN Benzamide, N-[2-[6-(3-chloco-2-thienyl)-1,4-dihydro-7[(methoxyacetyl) amino]-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4fluoro- (9CI) (CA INDEX NAME)

RN 846570-18-1 CAPLUS

CN Benzamide, N-[2-{6-(3-chloro-2-thienyl)-7-{{(dimethylamino) acetyl]amino}-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl}ethyl]-4-fluoro-{9CI} (CA INDEX NAME)

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

NH C1 S NMe2

Double bond geometry as shown.

RN 846570-09-0 CAPLUS
CN Benzamide, N-[6-(3-chloro-2-thienyl)-4,5-dihydro-5-[2-(4-quinazolinylamino)ethyl]-4-thioxo-lH-pyrrolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

RN 846570-15-8 CAPLUS
CN Benzamide, N-[2-[7-(acetylamino)-6-(3-chloro-2-thienyl)-1,4-dihydro-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-4-fluoro- (9CI) (CA INDEX NAME)

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 846570-19-2 CAPLUS
Benzamide, N-[2-[6-(3-chloro-2-thienyl)-7-[(cyclopropylcarbonyl)amino]-1,4dihydro-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-4-fluoro- (9CI)
(CA INDEX NAME)

RN 846570-20-5 CAPLUS
CN Benzamide, N-[2-[6-(3-chloro-2-thienyl)-7-[(cyclopentylcacbonyl)amino]-1,4dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-fluoro- (9CI)
(CA INDEX NAME)

846570-21-6 CAPLUS Benzamide, N-[2-[6-(3-chloro-2-thienyl)-7-[(cyclohexylcarbonyl)amino]-1,4-dihydro-4-thioxo-5H-pytrolo[3,2-d]pytimidin-5-yl]ethyl]-4-fluoro- (9CI) (CA INDEX NAME)

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

PAGE 1-A

PAGE 2-A

846570-24-9 CAPLUS
2-Furancarboxamide, N-[6-(3-chloro-2-thienyl)-5-[2-[(4-fluorobenzoyl) amino]ethyl]-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued) PAGE 2-A

846570-22-7 CAPLUS 2-Naphthalenecarboxamide, N-[6-(3-chloro-2-thienyl)-5-[2-[(4-fluorobenzoyl)amino]ethyl]-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-7-yl]- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

846570-23-8 CAPLUS
1-Naphthalenecarboxamide, N-[6-(3-chloro-2-thienyl)-5-[2-[(4-fluorobenzoyl)amino]ethyl]-4,5-dihydro-4-thioxo-lH-pyrrolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

84657D-25-0 CAPLUS
2-Thiophenecarboxamide, N-[6-(3-chloro-2-thienyl)-5-[2-[(4-fluorobenzoyl)amino]ethyl]-4,5-dihydro-4-thioxo-1H-pyrcolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

846570-26-1 CAPLUS 2-Pyridinecarboxamide, N-[6-(3-chloro-2-thienyl)-5-[2-[(4-fluorobenzoyl)amino]ethyl]-4,5-dihydro-4-thioxo-1H-pyrcolo[3,2-d]pyrimidin-7-yl)- (9CI) (CA INDEX NAME)

PAGE 2-A

846570-27-2 CAPLUS
3-Pyridinecarboxamide, N-[6-(3-chloro-2-thienyl)-5-[2-[(4-fluorobenzoyl)amino]ethyl]-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A

PAGE 1-A

846570-29-4 CAPLUS
Benzeneacetamide, N-[6-(3-chloro-2-thienyl)-5-[2-[(4-fluorobenzoyl)amino]ethyl]-4,5-dihydro-4-thioxo-IH-pyrrolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

846570-30-7 CAPLUS
Benzenepropanamide, N-[6-(3-chloro-2-thienyl)-5-[2-[4-fluorobenzoyl)amino]ethyl]-4,5-dihydro-4-thioxo-IH-pyrrolo[3,2-d]pyrimidin-7-yl]- (CAI NDEX NAME)

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A

846570-28-3 CAPLUS
4-Pyridinecarboxamide, N-[6-(3-chloro-2-thienyl)-5-[2-[(4-fluorobenzoyl)amino]ethyl]-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-7-yl]- (GCI NDEX NAME)

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

846570-32-9 CAPLUS
Benzenecarbothioamide, N-[2-[6-(3-chloro-2-thienyl]-1,4-dihydro-7[(phenylmethyl)amino]-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4fluoro- (9CI) (CA INDEX NAME)

846570-33-0 CAPLUS
Benzenecarbothioamide, N-[2-[6-(3-chloro-2-thienyl)-1,4-dihydro-7[([phenylamino]carbonyl]amino]-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5yl]ethyl]-4-fluoro- (9CI) (CA INDEX NAME)

846570-34-1 CAPLUS
Acetamide, N-[6-(3-chloro-2-thienyl)-5-[2-[[(4-fluorophenyl)thioxomethyl]amino]ethyl]-4,5-dihydro-4-thioxo-1H-pycrolo[3,2-d]pyrimidin-7-yl]-2,2,2-trifluoro-(9CI) (CA INDEX NAME)

## 10524995.trn

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

846570-35-2 CAPLUS
Acetamide, N-[6-(3-chloro-2-thienyl)-5-[2-[[(4-fluorophenyl)thioxomethyl]amino]ethyl]-4,5-dihydro-4-thioxo-lH-pyrrolo[3,2-d]pyrimidin-7-yl]-2-hydroxy- (9C1) (CA INDEX NAME)

846570-36-3 CAPLUS Acetamide, N-[6-(3-chloro-2-thieny1)-5-[2-[[(4-fluorophenyl)thioxomethyl]amino]ethyl]-4,5-dihydro-4-thioxo-lH-pyrrolo[3,2-d]pyrimidin-7-yl]-2-methoxy- (9CI) (CA INDEX NAME)

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

846570-40-9 CAPLUS
Cyclohexanecarboxamide, N-[6-(3-chloro-2-thienyl)-5-[2-[[(4-fluorophenyl)thioxomethyl]amino]ethyl]-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) d]pyrimidin-7-yl}-2-(dimethylamino)- (9CI) (CA INDEX NAME)

846570-38-5 CAPLUS
Cyclopropanecarboxamide, N=[6-(3-chloro-2-thienyl)-5-[2-[[(4-fluorophenyl)thioxomethyl]amino]ethyl]-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

846570-39-6 CAPLUS
Cyclopentanecarboxamide, N-[6-(3-chloro-2-thienyl)-5-[2-[[(4-fluorophenyl)thioxomethyl)amino]ethyl]-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

846570-41-0 CAPLUS
2-Maphthalenecarboxamide, N-[6-(3-chloro-2-thienyl)-5-[2-[[4-fluorophenyl)thioxomethyl]amino]ethyl]-4,5-dihydro-4-thioxo-lH-pyrrolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

846570-42-1 CAPLUS
1-Maphthalenecarboxamide, N-[6-(3-chloro-2-thienyl)-5-[2-[[(4-fluorophenyl)thioxomethyl]amino]ethyl]-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

846570-43-2 CAPLUS
2-Furancatboxamide, N-[6-(3-chloro-2-thienyl)-5-[2-[[(4-fluorophenyl)thioxomethyl]amino]ethyl]-4,5-dihydro-4-thioxo-lH-pyrrolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) fluorophenyl)thioxomethyl]amino]ethyl]-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

846570-46-5 CAPLUS
2-Pyridinecarboxamide, N-[6-(3-chloro-2-thienyl)-5-(2-[[4-fluorophenyl]thioxomethyl]amino]ethyl]-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-7-yl]- (9Cl) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 846570-47-6 CAPLUS 3-Pyridinecarboxamide, N-[6-(3-chloro-2-thienyl)-5-[2-[[(4-

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN . (Continued)

846570-44-3 CAPLUS
2-Thiophenecarboxamide, N-[6-(3-chloro-2-thienyl)-5-[2-[[(4-fluorophenyl)thioxomethyl]amino]ethyl]-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

946570-45-4 CAPLUS Benzamide, N-{6-(3-chloro-2-thienyl)-5-[2-{{{4-

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) fluorophenyl)thioxomethyl]aminojethyl]-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

846570-48-7 CAPLUS
4-Pyridinecarboxamide, N-[6-(3-chloro-2-thienyl)-5-[2-[[(4-fluorophenyl)thioxomethyl]amino]ethyl]-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

846570-49-8 CAPLUS
Benzeneacetamide, N-[6-(3-chloro-2-thienyl)-5-[2-[[(4-fluorophenyl)thioxomethyl)amino]ethyl]-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

846570-50-1 CAPLUS

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

846570-57-8 CAPLUS
Carbamic acid, [2-{7-(aminocarbonyl)-6-(3-chloro-2-thienyl)-1,4-dihydro-4-oxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

846570-58-9 CAPLUS
Carbamic acid, [2-[7-(aminocarbonyl)-6-cyclopropyl-1,4-dihydro-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

846570-59-0 CAPLUS
Carbamic acid, [2-[7-amino-6-(3-chloro-2-thienyl)-1,4-dihydro-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CN Benzenepropanamide, N-[6-(3-chloro-2-thienyl)-5-[2-[(4-fluorophenyl)thioxomethyl]amino]ethyl]-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-7-yl]- (9CI) (CA INDEX NAME)

587856-29-9P 846570-56-7P 846570-57-8P
846570-58-9P 846570-59-0P 846570-60-3P
846570-72-7B 846570-73-8P 846570-71-8P
846570-72-7B 846570-713-8P 846570-77-2P
846570-78-0P 846570-76-1P 846570-77-2P
846570-78-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or ceagent) (preparation of pyrrolopyrimidinethione derivs. as GSK-3 inhibitors for treatment of diabetes, inflammation, etc.)
587856-29-9 CAPLUS
Carbamic acid, [2-[6-{3-chloro-2-thienyl}-7-cyano-1,4-dhydro-4-oxo-5H-pyrrolof3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

846570-56-7 CAPLUS

Carbamic acid, [2-(7-cyano-6-cyclopropyl-1,4-dihydro-4-oxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

846570-60-3 CAPLUS
Carbamic acid, [2-(7-amino-6-cyclopropyl-1,4-dihydro-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

846570-72-7 CAPLUS
Carbanic acid, [2-[6-(3-chloro-2-thienyl)-1,4-dihydro-4-oxo-7[(trifluoroacetyl)amino)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

846570-73-8 CAPLUS Acetamide, N-(5-(2-aminoethyl)-6-(3-chloro-2-thienyl)-4,5-dihydro-4-oxo-1H-pyrrolo[3,2-d]pyrimidin-7-yl]-2,2,2-trifluoro-, monohydrochloride (9CI) (CA INDEX NAME)

• HCI

846570-74-9 CAPLUS
Benzamide, N-[2-[6-(3-chloro-2-thienyl)-1,4-dihydro-4-oxo-7-[(trifluoroacetyl)amino]-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-fluoro-(9C1) (CA INDEX NAME)

846570-75-0 CAPLUS
Benzamide, N-[2-[4-chloro-6-(3-chloro-2-thienyl]-7-[(E)[(dimethylamino)methylene]amino]-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4fluoro- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Title compds. I (A1 = single bond, etc.: A2 = single bond, etc.: G1 = single bond, etc.: A3 = single bond, etc.: A4 = single bond, etc.: G2 = H, (un)substituted aliphatic hydrocarbon, etc.: A5 = single bond, NR2O1: R2O1 = H, aliphatic hydrocarbon; A6 = single bond, etc.: R2 = H, F, etc.: R3 = H,

etc.] were prepared for example, acylation of 5-(2-aminoethyl)-6-(3-chlorothien-2-yl)-7-iodo-3-hydropyrrolo[3,2-d]pyrimidin-4-thione-CF3CO2H with 4-fluorobenzoyl chloride afforded compound II in 47h yield. In GSK-3 (glycogen synthase kinase-3) enzyme inhibition assays, the IC50 value of compound II was <100 nM. Compds. I are claimed useful as GSK-3 inhibitors for the treatment of diabetes, inflammation, etc. Formulation is given.

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

846570-76-1 CAPLUS Carbamic acid, [2-[7-(benzoylamino)-6-(3-chloro-2-thienyl)-1,4-dihydro-4-oxo-5H-pycrolo[3,2-d]pycimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

846570-77-2 CAPLUS Benzamide, N-[5-(Z-aminoethyl)-6-(3-chloco-2-thienyl)-4,5-dihydro-4-oxo-1H-pyrrolo(3,2-d)pyrimidin-7-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

846570-78-3 CAPLUS Benzamide, N-[6-(3-chloro-2-thieny1)-4,5-dihydro-4-oxo-5-[2-(4-quinazolinylamino)ethy1]-1H-pyrrolo[3,2-d]pyrimidin-7-y1]- [9CI) (CA INDEX NAME)

L16 ANSWER 3 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:1082029 CAPLUS COCCUMENT NUMBER: 142:56345 Frocess for the preparation of 9-deazaguanine derivatives

derivatives
Elliott Arthur J.; Walsh, David A.; Morris, Philip E.
Biocryst Pharmaceuticals, Inc., USA
U.S. Pat. Appl. Publ., 26 pp., Cont.-in-part of U.S.
Ser. No. 762.832, abandoned.
CODEN: USXXCO INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

Patent English 1 LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	_	DATE
US 2004254181 US 6946554	A1 B2	20041216	US 2004-878035	-	20040629 <
PRIORITY APPLN. INFO.: OTHER SOURCE(S):			US 1996-762832 MARPAT 142:56345	В1	19961210 <

192653-69-3P RL: SPN (Synthetic preparation); PREP (Preparation) (process for preparation of 9-deazaguanine derivs. via cyclization of guanidinylpyrcolecarboxylates) 192653-69-3 CAPLUS 4H-Pyrcolo[3,2-d]pyrimidin-4-one, 2-amino-1,5-dihydro-6-methyl-7-(phenylmethyl)- (9CI) (CA INDEX NAME)

GI

L16 ANSWER 3 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

AB Derivs. of 9-deazaguanine (I) [wherein X = (un)substituted Ph or naphthyl, 5- or 6-member heterocyclic group having one N, S, or 0 atom, alicyclic group selected from the group consisting of cycloperaffins and cycloolerins having up to 9 carbon atoms, group represented by the formula RS(CA6R7)a(Y) fc/H2/0-4/N RS = (un)substituted cyclic group wherein said cyclic group is selected from the group consisting of aromatic, heteroarom., alicyclic and heteroalicyclic groups having five to nine atoms and containing
one or more heteroatoms selected from the group consisting of 0, N and S; R6, R7 = H, Cl-4 alkyl; a = 0.4; b = 0.6; c = 0, 1; V = cyano, CSNH2, P0(OH)2, CO2H, SCNH2, CH2, OH, COMNH02, tetracolyl, triazolyl, CO8H; R8 = Cl-4 alkyl, CF3, NH2, Cl-4 alkow; V = 0, NH; Q = H, Cl-3 alkyl, CF3, Ph) are prepared by reacting an aldehyde or ketone of formula QCOCH(CH2X)(N) (Q, X = same as above) with a dialkylaminomalonate to form the corresponding enamine. The enamine is then reacted with a base to form a cyclic pyrrole (II) (Q, X = same as above; R2 = Cl-4 alkyl). The cyclic pyrrole II is reacted with an urea compound of formula R3OCON:C(R1NHCO2R) (R3 Cl-4 alkowy) or a derivative of carbamimidoic acid of formula
R10CON:C(R1NHCO2R)
R10CON:C(R1NHCO2R)
R10 = (un)substituted Ph; R11 = Cl-4 alkowy] to provide a protected guanidino compound (III) or (IV) (Q, X, R2, R3, R10, R11 = same as above). The guanidino III or IV is converted to the desired 9-deazaguanine derivative
I by reacting with trifluoroacetic acid or with an alkowide or hydroxide followed by neutralization with an acid. Thus. 3 -12-novity/larconionity is

vative
I by reacting with trifluoroacetic acid or with an alkoxide or hydroxide followed by neutralization with an acid. Thus, 3-(2-pyridyl)propionitrile was added to a suspension of NaH in THP, treated dropwise with Et formate over 3 h and 10 min, and stirred overnight to give 101% 2-cyano-3-(2-pyridyl)propionaldehyde sodium enolate which was added to MeOH and 1820 under ice-cooling, treated with di-Et aminomalonate hydrochloride, adjusted to pH .apprx.6.5 with 6 N HCl, and stirred for 15 h to give di-Et [(2-cyano-2-(2-pyridyl)enthyl)unival)amino]malonate (V). V was dissolved in MeOH and stirred with ice-bath cooling while 25 weight NaOMe solution in MeOH (12.7 mL 55.47 mmol) was added, and the the dark

brown
mixture was stirred at room temperature for 2 days to give 3-amino-4-[{2pyridyl)methyl]-IH-pyrcole-2-carbowylic acid Me ester(VI). VI,
N,N'-bis(carbomethoxy)-5-methylisothiourea, and EIM were stirred together
in McCN, and treated with mercuric chloride upon which an immediate
precipitate
as observed, and the mixture was stirred at room temperature for 16 h to
give

 $3-[N,N^*-bis(carbomethoxy)]$  guanidinyl]-4-(phenylmethyl)-1H-pyrrole-2-carboxylic acid Me ester (VII). VII, NaOMe, and MeOH were stirred together and boiled under reflux for 16 h, evaporated in vacuo, and treawith aqueous AcOH to give 70% 2-amino-7-[(2-pyridyl)methyl]-4-oxo-3H,5H-pyrrolo[3,2-d]pyrimidine.

L16 ANSWER 4 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

GI

The title compds. I [W = N or CR1; R1 = H, halo, trihaloalkyl, CN, NH2, NO2, OR6, N=CNA6R7, N(R6)C(-NR8)NR6R7, SR6, S(O)1-2R6, SO2NR6R7, CO2R6, etc.; L = O, S(O)0-2, or NR3; Q = C or N, when Q = N, then R4 does not existr R2, R3 = H or R7; R4, R5 = H, OR6, NR6R7, S(O)0-2R6, SO2NR6R7, CO2R6, C(O)RR6R7, N(R6)SO2R6, N(C)02R6, C(O)R7, CN, NO2, NH2, halo, trihaloalkyl, R7; or R4, R5 when taken together, form a five or six-membered aromatic ring containing O-2 N; R6, R7 = H, (substituted) (aryl)alkyl, (substituted) heterocyclylalkyl, cubstituted) aryl, substituted) heterocyclyl, with proviso or R6, R7 = when taken together with a common N to which they are attached, form a five to seven-membered heterocyclic ring containing at least one addnl. heteroatom selected from N, O, S, or P; R8 = H, NO2, CN, OR6, or (substituted)alkyl; X = (substituted) heterojaromatic ring; K = O, S, (substituted) alkyl; X = (substituted) heterojaromatic ring; K = O, S, (substituted) aminol were prepared as kinase modulators to treat kinase-dependent diseases and conditions. For example compound II was prepared in a multi-step synthesis starting from 4-methylimidazole. The latter inhibited KDR and EGFR with ICSO < 50 nM.

Page 26

L16 ANSWER 4 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:493723 CAPLUS
DOCUMENT NUMBER: 1141:54195
ITITLE: PROPERTY OF ACT O DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

LY ACC. ...

MI INFORMATION:

PATENT NO.

KIND DATE

APPLICATION ...

WO 2004050681

A2 20040617

WO 2003-US36567

20031114 <-
A3 20041104

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, MP, KR, KZ, LC, LK,
LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
OM, PG, FH, PL, PT, RO, RU, SC, SD, SE, GS, KS, LS, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RY: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
TR, BF, BJ, CP, CG, CL, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
CA 2505646

A1 20040617

CA 2505646

A1 20040617

A2 2003-205655

A1 20040617

A2 2003-205655

A1 20040617

A2 2003-205655

A1 20040617

A2 2003-205655

A1 20040617

A2 2003-205654

A3 200410623

A4 2003302665

A1 20040617

A2 2003-205655

A1 20040617

A2 2003-205655

A1 20040617

A2 2003-205654

A3 200510727

T 2006510727

T 20060310

JP 2004-570758

20031114 <-
WO 2003-470674P

P 200301114 <-
WO 2003-470674P

P 200301114 <-
WO 2003-470674P

P 200301114 <-
MARPAT 141:54195 US 2006122171 PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 141:54195

IT 705947-08-6P
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent)
(preparation of oxindole derive. as kinase modulators)

RN 705947-08-6 CAPLUS
CN 5H-Pyrcolo[3,2-d]pyrimidine-7-carboxylic acid, 6,7-dihydro-2-[[1-(2-methoxyethyl)-4-piperidinyl]amino]-6-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 4 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

```
10524995.trn
L16 ANSWER 5 OF 60
ACCESSION NUMBER:
DOCUMENT NUMBER:
117ILE:
2003:719265 CAPLUS
139:240337
Pinl peptidyl prolyl isomerase-modulating compounds and methods of use in the treatment of cancer and other Pinl-associated conditions
Mckee, Timochy D., Suto, Robert K.
PATENT ASSIGNEE(S):
SOURCE:
DOCUMENT TYPE:

COEN: PIXXD2
Patent
 DOCUMENT TYPE:
                                                                                           Patent
  LANGUAGE:
                                                                                          English
1
 FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                                                                                                               APPLICATION NO.
                  PATENT NO.
WO 2003073999
WO 2003073999
                                                                                           A2
A3
                                                                                                                  DATE
20030912
20031231
                                                                                                                                                                                                                                                   DATE
                                                                                                                                                               WO 2003-US6399
                                                                                                                                                                                                                                                   20030303 <--
                WO 2003073999 A3 200303131 W0 2003-0255399 Z0030303 <--
W1 AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MY, MX, RZ, NO, NZ, OM, PH, PIL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

RYS: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, BU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, MG, GG, GM, HL, NR, NE, SM, TD, TG, AU 2003217870 A1 20030916 A1 2002-217870 20030303 <--

RYS OURCE (S): WARPAT 139:240337
 PRIORITY APPLN. INFO.:
OTHER SOURCE(S): MARPAT 139:240337

The source (S): MARPAT 139:240337

RI: PAC (Pharmacological activity): THU (Therapeutic use): BIOL (Biological study): USES (Uses)

(Pinl peptidy) rould be source and other Pinl-associated conditions)

RN 383161-28-2 CAPLUS

CN IH-Pyrrolo[3,2-6]pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-4-oxo-5-phenyl- (9CI) (CA INDEX NAME)
                  383161-28-2 CAPLUS
1H-Pyrrolo[7,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-4-oxo-5-phenyl- (9CI) (CA INDEX NAME)
```

```
L16 ANSWER 6 OF 60
ACCESSION NUMBER:
DOCUMENT NUMBER:
2003:678811 CAPLUS
139:21482
Preparation of pyrrolopyrimidine derivatives as GSK-3
inhibitors
INVENTOR(S):

PATENT ASSIGNEE(S):
PATENT ASSIGNEE(S):
SOURCE:
DOCUMENT TYPE:
DOCUMENT TYPE:
PATENT ASSIGNEE(S):
DOCUMENT TYPE:
DOCUMENT TYPE:
PATENT ASSIGNEE(S):
DOCUMENT TYPE:
DOCUMENT TYPE:
PATENT ASSIGNEE(S):
DOCUMENT TYPE:
PATENT ASSIGNEE(S):
DOCUMENT TYPE:
DOCUMENT TYPE:
PATENT ASSIGNEE(S):
DOCUMENT TYPE:
PATENT ASSI
     FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                               CN 1633436
                                  MX 2004PA06862
US 2005277773
                                       NO 2004003944
   PRIORITY APPLN. INFO .:
OTHER SOURCE(5): MARPAT 139:214482
IT $87857-21-4P 587857-22-5P
RL: PAC (Pharmacological activity): RCT (Reactant): SPN (Synthetic preparation): THU (Therapeutic use): BIOL (Biological study): PREP (Preparation): RACT (Reactant or reagent): USES (Uses) (drug candidate; preparation of pyrrolopyrimidine derivs. as GSK-3 inhibitors)
RN 587857-21-4 CAPLUS
CN 3H-Pyrroloj2,2-d)pyrimidine-7-carbonitrile, 6-bromo-4,5-dihydro-4-oxo-(CA INDEX NAME)
```

The invention discloses modulators, e.g., inhibitors of Pinl and Pinl-related proteins, and the use of such modulators for treatment of Pinl-associated states, e.g., for the treatment of cancer. Compds. of the invention include I [dashed lines = single or double bonds; Gl = CH, N: C2, G3 = H, N, CH2, CH, NH; R1, R2, R3, R3, R4, R4', X1-X5 = H, acyl, (un)substituted alkyl, etc.]. Determination of Pinl overexpression in a etc variety
of tumor types is also presented.

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587857-22-5 CAPLUS
1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(2-methoxyphenyl)-4-oxo-(9CI) (CA INDEX NAME)

```
CN

587855-92-3P 587855-95-6P 587856-00-6P
587856-04-0P 587856-08-4P 587856-11-9P
587856-13-1P 587856-13-3P 587856-13-9P
587856-23-3P 587856-13-3P 587856-13-9P
587856-23-3P 587856-26-6P 587856-29-9P
587856-63-3P 587856-67-1P 587856-59-5P
587856-62-0P 587856-63-1P 587856-59-5P
587856-67-9P 587856-63-1P 587856-69-7P
587856-70-0P 587856-63-1P 587856-69-7P
587856-70-0P 587856-63-1P 587856-77-7P
587856-81-3P 587856-83-1P 587856-73-7P
587856-81-3P 587856-83-1P 587856-83-5P
587856-81-3P 587856-83-7P 587856-83-5P
587856-81-3P 587856-83-7P 587856-83-5P
587856-90-4P 587856-83-0P 587856-83-5P
587856-90-4P 587856-91-3P 587856-92-6P
587856-90-4P 587856-91-3P 587856-92-6P
587857-02-1P 587857-03-2P 587857-01-0P
587857-03-2P 587857-03-2P 587857-01-0P
587857-03-2P 587857-13-6P
587857-11-2P 587857-13-4P
587857-11-2P 587857-13-6P
587857-22-6P 587857-13-6P
587857-22-6P 587857-30-5P
587857-33-6P
587857-32-2P
587857-31-8P
5
```

ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 587857-63-4P 587857-64-5P 587857-65-6P 587857-66-P 587857-67-8P 587857-65-6P 587857-66-P 587857-67-8P 587857-65-6P 587857-70-1P 587857-70-1P 587857-71-4P 587857-72-5P 587857-73-69 587857-71-4P 587857-73-6P 587857-71-69 587857-71-69 587857-71-0P 587857-73-1P 587857-73-69 587857-71-0P 587857-73-1P 587857-73-2P 587857-71-0P 587857-73-1P 587857-73-2P 587857-83-P 587857-93-P 587857-83-P 587857-93-P 587857-93-P 587857-93-1P 587857-93-1P 587857-93-1P 587857-93-1P 587857-93-P 587857-93-1P 587857-93-1P 587857-93-P 587857-93-P 587857-93-1P 587858-01-3P 587858-03-P 587858-03 (Uses)
[drug candidate; prepn. of pyrrolopyrimidine derivs. as GSK-3
inhibitors)
587855-92-3 CAPLUS
HP-Pyrrolof1, 2-d|pyrimidine-7-carbonitrile, 4,5-dihydro-5-methyl-4-oxo-6phenyl- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

i-Pro- (CH2) 3

S87856-11-9 CAPLUS HH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-[2-(benzoyloxy)ethyl]-4,5-dihydro-4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

CH2-CH2-O-C-Ph

587856-13-1 CAPLUS
Carbamic acid, [2-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d)pyrimidin-5-yl)ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

36/8306:3-3 GAPURA (2-13) GAPURA (2-14) GAPU

|| t-BuO-C-NH-CH<sub>2</sub>-

RN 587856-18-6 CAPLUS

Page 28

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587855-95-6 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-cerbonitrile, 4,5-dihydro-5-methyl-6-phenyl-4-thioxo-(9CI) (CA INDEX NAME)

587856-00-6 CAPLUS
1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(2-hydroxyethyl)-4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

587856-04-0 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(3-hydroxypropyl)-4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

587856-08-4 CAPLUS 1H-Pyrcolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylethoxy)propyl]-6-(4-nitrophenyl)-4-oxo- (9CI) (CA INDEX NAME)

ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
Carbamic acid, [2-[7-cyano-6-[2-fucany1]-1,4-dihydro-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

587856-23-3 CAPLUS
Carbamic acid, [2-{7-cyano-1,4-dihydro-6-(3-methyl-2-furanyl)-4-oxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CINDEX NAME)

587856-26-6 CAPLUS
Carbamic acid, [2-[7-cyano-1,4-dihydro-6-[3-methyl-2-thienyl]-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

587856-29-9 CAPLUS Carbamic acid, [2-[6-{3-chloro-2-thienyl}-7-cyano-1,4-dihydro-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

#### 10524995.trn

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587856-35-7 CAPLUS
Carbamic acid, [3-[7-cyano-6-(2-furanyl)-1,4-dihydro-4-oxo-5H-pycrolo[3,2-d]pyrimidin-5-yl]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

587856-47-1 CAPLUS Benzamide, N-[2-(6-chloro-7-cyano-1,4-dihydro-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

587856-50-6 CAPLUS
Benzamide, N-[2-(6-chloro-7-cyano-1,4-dihydco-4-thioxo-5H-pyrrolo[3,2-d]pyriadin-5-y]ethyl]- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

HC1

587856-63-1 CAPLUS IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-aminoethyl)-4,5-dihydro-6-[3-methyl-2-furanyl)-4-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

587856-65-3 CAPLUS
IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-aminoethyl)-4,5-dihydro-6-(3-methyl-2-thienyl)-4-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

HC1

587856-67-5 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-aminoethyl)-6-(3-chloro-2-thienyl)-4,5-dihydro-4-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

\$87856-54-0 CAPLUS

IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-chloro-4,5-dihydro-5-[3-{1-methylethoxy)propyl]-4-oxo- (9CI) (CA INDEX NAME)

587856-57-3 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-chloro-4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-thloxo- [9CI) (CA INDEX NAME)

587856-59-5 CAPLUS IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-aminoethyl)-4,5-dihydro-4-oxo-6-phenyl-, monbydrochloride (9CI) (CA INDEX NAME)

• HC1

587856-62-0 CAPLUS
1H-Pyrcolo[3.2-d]pyrimidine-7-carbonitrile, 5-(2-aminoethyl)-6-(2-furanyl)-4,5-dihydro-4-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

• HC1

S87856-69-6 CAPLUS IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-aminoethyl)-4,5-dihydro-6-methyl-4-oxo-, monhydrochloride (9C1) (CA INDEX NAME)

• HCl

587856-69-7 CAPLUS IN-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-{2-aminoethyl}-6-{2,6-difluorophenyl}-4,5-dihydro-4-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

587856-70-0 CAPLUS
1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-aminoethyl)-4,5-dihydro-6-(1-methyl-1H-pyrrol-2-yl)-4-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

• HC1

RN 587856-71-1 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(3-aminopropyl)-6-(2-furanyl)-4,5-dihydro-4-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

HC1

RN 587856-73-3 CAPLUS
CN Acetamide, N-[2-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2,2,2-trifluoro-(9CI) (CA INDEX NAME)

RN 587856-74-4 CAPLUS
CN Acetamide, N-[2-{7-cyano-6-(2-furanyl)-1,4-dihydro-4-oxo-5H-pyrrolo[3,2-d)pyrimidin-5-ylethyl|-2,2,2-trifluoro-(SCI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587856-79-9 CAPLUS

Acetamide, N-[2-[7-cyano-6-(2,6-difluorophenyl)-1,4-dihydro-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-2,2,2-trifluoro-(9CI) (CA INDEX NAME)

RN 587856-80-2 CAPLUS
CN Acetamide, N-[2-(7-cyano-1,4-dihydro-6-methyl-4-oxo-5H-pyrrolo[3,2-dipyrimidin-5-yl)ethyl]-2,2,2-trifluoro- (9Cl) (CA INDEX NAME)

RN 587856-81-3 CAPLUS
CN Acetamide, N-(2-(7-cyano-6-cyclopropyl-1,4-dihydro-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2,2,2-trifluoro- (9CI) (CA INDEX NAME)

Page 30

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 587856-76-6 CAPLUS
CN Acetamide, N-[2-[7-cyano-1,4-dihydro-6-(3-methyl-2-furanyl)-4-oxo-SH-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-2,2,2-trifluoro-(9CI) (CA INDEX NAME)

RN 587856-77-7 CAPLUS
CN Acetamide, N-{2-[7-cyano-1,4-dihydro-6-(3-methyl-2-thienyl)-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-2,2,2-trifluoro-(9CI) (CA INDEX NAME)

RN 587856-78-8 CAPLUS

Acetamide, N-[2-[6-(3-chloro-2-thienyl)-7-cyano-1,4-dihydro-4-oxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-2,2,2-trifluoro- [9CI] (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587856-82-4 CAPLUS
CN Acetamide, N-[2-(6-benzo[b]thien-2-yl-7-cyano-1,4-dihydro-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2,2,2-trifluoro-(9CI) (CA INDEX NAME)

RN 587856-83-5 CAPLUS
CN Acetamide, N-[2-[7-cyano-1,4-dihydro-6-(1-methyl-1H-pyrrol-2-yl)-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-2,2,2-trifluoro- (9CI) (CA INDEX NAME)

RN 587856-84-6 CAPLUS
CN Acetamide, N-[2-(4-chloro-7-cyano-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yllethyl]-2,2,2-trifluoro-(9CI) (CA [NDEX NAME]

RN 587856-85-7 CAPLUS
CN Acetamide, N-[2-[4-chloro-7-cyano-6-(2-furany1)-5H-pyrrolo[3,2-d]pyrimidin-5-y1]ethyl]-2,2,2-trifluoro- (9CI) (CA INDEX NAME)

RN 587856-86-8 CAPLUS
CN Acetamide, N-[2-[4-chloro-7-cyano-6-(3-methyl-2-furanyl)-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-2,2,2-trifluoro-(9CI) (CA INDEX NAME)

RN 587856-87-9 CAPLUS
CN Acetamide, N-[2-[4-chloro-7-cyano-6-(3-methyl-2-thienyl)-5H-pyrrolo[3,2-d)pyrimidin-5-yl]ethyl)-2,2,2-trifluoro-(9CI) (CA INDEX NAME)

RN 587856-88-0 CAPLUS
CN Acetamide, N-[2-[4-chloro-6-(3-chloro-2-thienyl)-7-cyano-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-2,2,2-trifluoro- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587856-92-6 CAPLUS
CN Acetamide, N-[2-{7-cyano-1,4-dihydro-6-{3-methyl-2-furanyl}-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-2,2,2-trifluoro- (9C1) (CA INDEX NAME)

RN 587856-93-7 CAPLUS

Acetamide, N-[2-[7-cyano-1,4-dihydro-6-(3-methyl-2-thienyl)-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-2,2,2-trifluoro- (9CI) (CA INDEX NAME)

RN 587856-94-8 CAPLUS
Acetamide, N-[2-[6-(3-chloro-2-thienyl)-7-cyano-1,4-dihydro-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-2,2,2-trifluoro-(9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587856-89-1 CAPLUS
CN Acetamide, N-[2-[4-chloro-7-cyano-6-(1-methyl-1H-pyrrol-2-y1)-5H-pyrrolo[3,2-d]pyrimidin-5-y1]ethyl]-2,2,2-trifluoro-(9Cf) (CA INDEX NAME)

RN 587856-90-4 CAPLUS
CN Acetamide, N-{2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl}-2,2,2-trifluoro-(9CI) (CA INDEX NAME)

$$\bigcap_{e}^{H}\bigcap_{CH_{2}-CH_{2}-NH-C-CF_{3}}^{Ph}$$

RN 587856-91-5 CAPLUS
CN Acetamide, N-{2-{7-cyano-6-(2-furany1)-1,4-dihydro-4-thioxo-5H-pyrrolo{3,2-d}pyrimidin-5-y1]ethyl}-2,2,2-trifluoro-(9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continu

RN 587856-95-9 CAPLUS
CN Acetamide, N-[2-[7-cyano-1,4-dihydro-6-(1-methyl-1H-pyrrol-2-yl)-4-thioxo-SH-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-2,2,2-trifluoro- (9CI) (CA INDEX NAME)

RN 587856-96-0 CAPLUS
CN IH-Pytrolo[3,2-d]pytimidine-7-carbonitrile, 5-(2-aminoethyl)-4,5-dihydro-6-phenyl-4-thioxo-(9CI) (CA INDEX NAME)

RN 587856-97-1 CAPLUS
CN HH-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 5-(2-aminoethyl)-6-(2-furanyl)-4,5-dihydro-4-thioxo-(9CI) (CA INDEX NAME)

RN 587856-98-2 CAPLUS

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN | 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-aminoethyl)-4,5-dihydro-6(3-methyl-2-furanyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN 587856-99-3 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-aminoethyl)-4,5-dihydro-6(3-methyl-2-thienyl)-4-thioxo- (9CI) (CA INDEX NAME)

AN 587857-00-9 CAPLUS CM IH-Pyrcol(3,2-d)pyrimidine-7-carbonitrile, 5-(2-aminoethyl)-6-(3-chloro-2-thlenyl)-4,5-dihydro-4-thloxo- (9CI) (CA INDEX NAME)

RN 587857-01-0 CAPLUS
CN HH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-(3-aminopropyl)-4,5-dihydro-6-phenyl-4-thioxo- [9C1] (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587857-06-5 CAPLUS
CN 1H-Pytrol0(3, 2-d) pyrimidine-7-carbonitrile, 5-(2-aminoethyl)-6-benzo(b)thien-2-yl-4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

RN 587857-07-6 CAPLUS
CN Acetamide, N-[3-{7-cyano-6-(2-furanyl)-1,4-dihydro-4-oxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]propyl]-2,2,2-trifluoro-(9CI) (CA INDEX NAME)

RN 587857-08-7 CAPLUS
CN Acetamide, N-[3-[4-chloro-7-cyano-6-[2-furanyl]-5H-pyrrolo[3,2-d]pyrimidin-5-yl]propyl]-2,2-etrifluoro-[9CI] (CA INDEX NAME)

RN 587857-09-8 CAPLUS
CN Acetamide, N-[3-[7-cyano-6-(2-furany1)-1,4-dihydco-4-thioxo-5H-pyrrolo[3,2-d]pyrindin-5-yl]propyl]-2,2,2-trifluoco-(9CI) (CA INDEX NAME)

Page 32

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 587857-02-1 CAPLUS
CN | H-Pyrrolo[3,2-0]pyrimidine-7-carbonitrile, 5-(2-aminoethyl)-6-(2,6-difluorophenyl)-4,5-dihydro-4-thioxo-(9CI) (CA INDEX NAME)

RN 587857-03-2 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-aminoethyl)-4,5-dihydro-6methyl-4-thioxo-(9CI) (CA INDEX NAME)

RN 587857-04-3 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-aminoethyl)-4,5-dihydro-6-(1-methyl-1H-pyrrol-2-yl)-4-thioxo-(9CI) (CA INDEX NAME)

RN 587857-05-4 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-aminoethyl)-6-cyclopropyl4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587857-10-1 CAPLUS
CN HH-Pyrcol[3,2-d]pyrimidine-7-carbonitrile, 5-(3-aminopropyl)-6-(2-furanyl)-4,5-dihydro-4-thioxo- (9C1) (CA INDEX NAME)

RN 587857-11-2 CAPLUS
CN Benzamide, N-(2-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrinidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 587857-12-3 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo{3,2-d]pyrimidin-5-yl}ethyl]- (9CI) (CA INDEX NAME)

RN 587857-13-4 CAPLUS
CN Benzoic acid, 3-[[[[2-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

Ph O O CO2H

RN 587857-14-5 CAPLUS
CN Benzamide, 2-amino-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pycimidin-5-yl)ethyl]-5-methyl- (9CI) (CA INDEX NAME)

RN 587857-15-6 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-[2-(1,4-dihydro-2,4-dioxo-3(2H)-quinazoliny1)ethyl]-4,5-dihydro-6-phenyl-4-thioxo-(9CI) (CA INDEX NAME)

RN 587857-16-7 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(3-methyl-2-thienyl)-4-oxo-5-[2-(4-quinazolinylamino)ethyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587857-23-6 CAPLUS
CN HH-Pycrol(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-6-(2-methoxyphenyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN S87857-24-7 CAPLUS
CN HH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(3-hydroxypheny)1-4-thioxo- (9CI) (CA INDEX NAME)

RN 587857-25-8 CAPLUS

Senzoic acid, 3-(7-cyano-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-6-y1)- (9C1) (CA INDEX NAME)

RN 587857-26-9 CAPLUS
CN Benzolc acid, 4-(7-cyano-4,5-dihydro-4-thioxo-1H-pytrolo[3,2-d]pyrimidin-6-y1)- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587857-17-8 CAPLUS
CN HH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)ethyl]-4,5-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587857-18-9 CAPLUS
CN Acetamide, N-[2-[7-cyano-6-phenyl-4-[[[2-(trimethylsilyl)ethoxy]methyl]thi
o]-5H-pycrolo[3,2-d]pyrimidin-5-yl]ethyl]-2,2,2-trifluoro- (9CI) (CA
INDEX NAME)

RN 587857-19-0 CAPLUS
CN IH-Pycrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[2-(methylamino)ethyl1-6-phenyl-4-thioxo- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 587857-27-0 CAPLUS
CN H-Pyrclo[3,2-d]pyrimidine-7-carbonitrile, 6-(2-aminophenyl)-4,5-dihydro-4-thioxo-(9CI) (CA INDEX NAME)

RN 587857-28-1 CAPLUS
CN IH-Pytrol[3,2-d]pytimidine-7-carbonitrile, 6-[3-(aminomethyl)phenyl]-4,5-dihydro-4-thioxo-(9CI) (CA INDEX NAME)

RN 587857-29-2 CAPLUS
CN Benzamide, N-[2-[7-cyano-6-(2-fluorophenyl)-1,4-dihydro-4-thioxo-5H-pyrrolof3,2-d)pyrimidin-5-yl]ethyl]- (SCI) (CA INDEX NAME)

RN 587857-30-5 CAPLUS
CN Benzamide, N-[2-[7-cyano-6-(4-ethoxyphenyl)-1,4-dihydro-4-thioxo-5H-pycrolo[3,2-d)pyrimidin-5-yl]ethyl]- (9Cl) (CA INDEX NAME)

### 10524995.trn

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Ph-C-NH-CH2-CH2

RN 587857-31-6 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2-bromophenyl)-4,5-dihydro4-oxo-(9C1) (CA INDEX NAME)

N CN

RN 587857-32-7 CAPLUS
CN 1H-Pycrolo[3,2-d] pyrimidine-7-carbonitrile, 6-(2-bromophenyl)-4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

5 Br CN

RN 587857-33-8 CAPLUS
CN HH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-4-oxo-5(phenylmethyl)- (9CI) (CA INDEX NAME)

CN Me CH2-Ph

RN 587857-34-9 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3,5-dihydroxyphenyl)-4,5-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

1-PrO- (CH2) 3 OH

RN 587857-38-3 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(4-aminophenyl)-4,5-dihydro-5-(1-methylethoxy)propyl]-4-oxo-, monohydrochloride (9CI) (CA INDEX NAMF).

i-Pro- (CH2) 3

• HC

RN 587857-39-4 CAPLUS

Acetamide, N-[4-[7-cyano-4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-oxo-1H-pyrrolo[3,2-d]pyrimidin-6-yl]phenyl]-2,2,2-trifluoro- (9CI) (CA INDEX NAME)

1-Pro- (CH2) 3 NH-C- CF3

RN 587857-40-7 CAPLUS
CN Acetamide, N-{4-{4-chloro-7-cyano-5-{3-{1-methylethoxy}propyl}-5H-pyrrolo(3,2-d)pyrimidin-6-yl)phenyl}-2,2,2-trifluoro- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) dihydro-5-[3-(1-methylethoxy)propyl]-4-oxo- (9CI) (CA INDEX NAME)

i-Pro-(CH2)3 OH

RN 587857-35-0 CAPLUS
CN Methanesulfonic acid, trifluoro-, 6-[3,5-bis(acetyloxy)phenyl]-7-cyano-5[3-(1-methylethoxy)propyl]-5H-pyrcolo[3,2-d]pyrimidin-4-yl ester (9CI)
(CA INDEX NAME)

F3C-S-O OAC

RN 587857-36-1 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-[3,5-bis(acetyloxy)phenyl]-4,5-dihydco-5-[3-(1-methylethoxy)propyl]-4-thioxo- (9CI) (CA INDEX NAME)

i-PrO-(CH2)3 OAC
S OAC
CN OAC

RN 587857-37-2 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3,5-dihydroxyphenyl)-4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587857-41-8 CAPLUS
CN Acetamide, N-[4-[7-cyano-4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-thioxo-lH-pyrrolo[3,2-d]pyrimidin-6-yl]phenyl]-2,2,2-trifluoro- (9CI) (CA INDEX NAME)

RN 587857-42-9 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(4-aminophenyl)-4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-thioxo-, monohydrochloride (9CI) (CA INDEX NAME)

i-Pro- (CH2) 3 N NH2

● HC1 N 587857-43-0 CAPLU

RN 587857-43-0 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylethoxy)propyl]-6-[4-[(phenylmethyl)amino]phenyl]-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

i-Pro- (CH2) 3 NH- CH2- Ph

587857-44-1 CAPLUS
Carbamic acid, [4-{7-cyano-4,5-dihydro-5-{3-(1-methylethoxy)propyl}-4-thioxo-1H-pyrrolo{3,2-d}pyrimidin-6-yl}phenyl}-, ethyl ester (9CI) (CA INDEX NAME)

587857-45-2 CAPLUS
3H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(3-hydroxpropyl)-4-oxo-6-phenyl-3-[[2-(trimethylsilyl)ethoxy]methyl]- (9CI)
(CA INDEX NAME)

587857-46-3 CAPLUS 3H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-5-(3-phenoxypropyl)-6-phenyl-3-[{2-(trimethylsilyl)ethoxy]methyl]- (9CI) (CA INDEX MAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587857-49-6 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(3-phenoxypropyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587857-50-9 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-phenyl-5-[2-[(phenylmethyl)amino]ethyl]-4-thioxo- (9CI) (CA INDEX NAME)

587857-51-0 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-phenyl-5-[2-(3-phenyl-1,2,4-oxadiazol-5-yl)ethyl]-4-thioxo- (9CI) (CA INDEX NAME)

587857-52-1 CAPLUS 5H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4-chloro-6-phenyl- (9CI) (CA INDEX NAME)

587857-53-2 CAPLUS 5H-Pyrrolo[3,2-d]pyrimidine-5-propanoic acid, 7-cyano-1,4-dihydro-4-oxo-6-phenyl-, ethyl ester (9CI) (CA INDEX NAME)

Page 35

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587857-47-4 CAPLUS
3H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-[methylus/fonyl)nxy]propyl]-4-oxo-6-phenyl-3-[[2-(trimethylsilyl)ethoxy]methyl]- [9CI) (CA INDEX NAME)

587857-48-5 CAPLUS
3H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-{2-(2-methoxytethoxy|ethoxy|ethoxy|ethoxy|ethoxy|ethoxy|ethoxy|ethoxy|ethoxy|ethoxy|ethoxy|ethoxy|ethoxy|ethyl}-(9CI) (CA INDEX NAME)

PAGE 1-A (CH2) 3-0-CH2-CH2-0-CH2-

PAGE 1-B

-- CH2-- OMe

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587857-54-3 CAPLUS 5H-Pyrcolo[3,2-d)pyrimidine-5-propanoic acid, 7-cyano-1,4-dihydro-6-(3-methyl-2-furanyl)-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)

587857-55-4 CAPLUS
5H-Pyrrolo[3,2-d]pyrimidine-5-propanoic acid, 7-cyano-1,4-dihydro-6-phenyl-4-thioxo-, ethyl ester (9CI) (CA INDEX NAME)

597857-56-5 CAPLUS 5H-Pyrcolol3,2-d]pyrimidine-5-propanoic acid, 7-cyano-1,4-dihydro-6-(3-methyl-2-fusnyl)-4-thioxo-, ethyl ester (9CI) (CA INDEX NAME)

587857-57-6 CAPLUS 5H-Pyrrolo[3,2-d]pyrimidine-5-propanoic acid, 7-cyano-1,4-dihydro-6-phenyl-

## 10524995.trn

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 4-thioxo- (9CI) (CA INDEX NAME)

RN 587857-58-7 CAPLUS CN 5H-Pyrrolo(3,2-d)pyrimidine-5-propanoic acid, 7-cyano-1,4-dihydro-6-(3methyl-2-furanyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN 587857-60-1 CAPLUS
CN 5H-Pyrcolo[3,2-d]pyrimidine-5-propanoic acid, 7-cyano-6-cyclopropyl-1,4-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

RN 587857-61-2 CAPLUS CN 5H-Pyccolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-6-phenyl-N-(phenylmethyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN 587857-62-3 CAPLUS

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
S87857-66-7 CAPLUS
CN H-Pytrolo[3,2-d]pytimidine-7-carbonitrile, 6-(hexahydro-1H-azepin-1-yl)4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

RN 587857-67-8 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(cyclopropylamino)-4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-thioxo- (9CI) (CA INDEX NAME)

RN S87857-68-9 CAPLUS
CN Benzamide, N-[2-[7-cyano-6-(cyclopcopylamino)-1,4-dihydro-4-thioxo-5H-pycrolo(],2-djpyrimidin-5-yljethyl]- (9CI) (CA INDEX NAME)

RN 587857-69-0 CAPLUS
CN Benzamida, N-[2-[7-cysno-6-(dimethylamino)-1,4-dihydro-4-thioxo-5Hpycrolo[3,2-d]pyrimidin-5-yl)ethyl]-4-fluoro(9CI) (CA INDEX NAME)

 $_{\text{RN}}$   $_{\text{S87857-70-3}}^{\text{S87857-70-3}}$  CAPLUS Benzamide, N-{2-[7-cyano-1,4-dihydro-6-(1-pyrrolidinyl)-4-thioxo-5H-Page 36

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN 4-Piperiolinecarboxylic acid, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimtdin-5-yl):1-axopropyl]- (9C1) (CA INDEX NAME)

RN 587857-63-4 CAPLUS
CN 5H-Pycrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-methoxy-N-methyl-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587857-64-5 CAPLUS
CN IH-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-5-(3-oxoheptyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587857-65-6 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(3-oxo-3-phenylpropyl)-6-phenyl-4-thioxo-(9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-4-fluoro- (9CI) (CA INDEX NAME)

$$\bigcap_{S} \bigcap_{N \to CH_2 - CH_2 - NH - C} \bigcap_{S} \bigcap_{T \to T} \bigcap_{$$

RN 587857-71-4 CAPLUS
CN Benzamide, N-(2-[7-cyano-6-(cyclobutylamino)-1,4-dihydro-4-thioxo-5Hpycrolo(3,2-d)pytmidin-5-yl)ethyl]-4-fluoro- (9C1) (CA INDEX NAME)

RN 587857-72-5 CAPLUS
CN 1H-Pytrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(1-hexenyl)-4,5-dihydro-4oxo- (9C1) (CA INDEX NAME)

$$\bigcap_{N} \bigcap_{NH} CH = CH - Bu - t$$

RN 587857-73-6 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-(2-phenylethenyl)- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587857-74-7 CAPLUS IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-phenyl-(SCI) (CA INDEX NAME)

587857-75-8 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-phenyl-4-thioxo(9CI) (CA INDEX NAME)

587857-76-9 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(2-methylphenyl)-4-oxo- (9CI) (CA INDEX NAME)

587857-77-0 CAPLUS 1H-Pyrcolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-6-(3-methylphenyl)-4-oxo- (9C1) (CA INDEX NAME)

 $587857-78-1 \quad CAFLUS \\ 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, \ 4,5-dihydro-6-(4-methylphenyl)-$ 

'L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3,5-dimethylphenyl)-4,5-dihydro-4-oxo- [9C1] (CA INDEX NAME)

587857-83-8 CAPLUS
'HI-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-[4-[1,1-dimethylethyl]phenyl]-4,5-dihydro-4-oxo- (9CI) (CA INDEX NAME)

587857-84-9 CAPLUS HK-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(4-cyclohexylphenyl)-4,5-dihydro-4-oxor (9C1) (CA INDEX NAME)

587857-85-0 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2-fluorophenyl)-4,5-dihydro-4-oxo- (9CI) (CA INDEX NAME)

587857-86-1 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3-fluorophenyl)-4,5-dihydro-4-oxo- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN 4-0x0- (9CI) (CA INDEX NAME)

587857-79-2 CAPLUS IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2,6-dimethylphenyl)-4,5-dihydro-4-oxo- (9CI) (CA INDEX NAME)

587857-80-5 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2,3-dimethylphenyl)-4,5-dihydro-4-oxo- (9CI) (CA INDEX NAME)

587857-81-6 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2,3-dimethylphenyl)-4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

587857-82-7 CAPLUS

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

587857-87-2 CAPLUS 1H-Pyrrolo[3, 2-d]pyrimidine-7-carbonitrile, 6-(4-fluorophenyl)-4,5-dihydro-4-oxo- (9CI) (CA INDEX NAME)

587857-88-3 CAPLUS IN-Pyrroid[3,2-d]pyrimidine-7-carbonitrile, 6-(2-chlorophenyl)-4,5-dihydro-4-oxo-(9C1) (CA INDEX NAME)

587857-89-4 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2-chlorophenyl)-4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

587857-90-7 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3-chlorophenyl)-4,5-dihydro-4-oxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 587857-91-8 CAPLUS
CN 1H-Pyrrolo(3, 2-d|pyrimidine-7-carbonitrile, 6-(4-chlorophenyl)-4;5-dihydro4-oxo-(9C1) (CA INDEX NAME)

RN 587857-92-9 CAPLUS
CN HH-Pyrcnol(3,2-d)pyrimidine-7-carbonitrile, 6-(2,3-dichlorophenyl)-4,5-dihydro-4-oxo-(9C1) (CA INDEX NAME)

RN 587857-93-0 CAPLUS CN H-Pycrolo[3,2-d]pycimidine-7-carbonitrile, 6-(2,5-dichlorophenyl)-4,5dihydro-4-owo-(9C1) (CA INDEX NAME)

RN 587857-94-1 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3,4-dichlorophenyl)-4,5-dihydro-4-oxo- (9C1) (CA INDEX NAME)

1.16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587857-99-6 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2,6-dimethoxyphenyl)-4,5-dihydro-4-oxo- (PCI) (CA INDEX NAME)

RN 587858-00-2 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2,5-dimethoxyphenyl)-4,5-dihydro-4-oxo- [9C1] (CA INDEX NAME)

RN 587858-01-3 CAPLUS
CN HH-Pycrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2,4-dimethoxyphenyl)-4,5-dihydro4-oxo-(9Cl) (CA INDEX NAME)

RN 587858-02-4 CAPLUS
CN 1H-Pyrcolo(3,2-d]pyrimidine-7-carbonitrile, 6-(2,4-dimethoxyphenyl)-4,5-dihydro-4-thioxo-(9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 6D CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 597857-95-2 CAPLUS
CN IH-Pyrcolol3,2-d|pyrimidine-7-carbonitrile, 6-(2,4-dichlorophenyl)-4,5-dihydro4-axxo-(9C1) (CA INDEX NAME)

RN 587857-96-3 CAPLUS
-CN 1H-Pycrolo[3,2-d]pycimidine-7-carbonitrile, 6-(2,4-dichloropheny1)-4,5-dihydro-4-thioxo-(9CI) (CA INDEX NAME)

RN 587857-97-4 CAPLUS
CN 1H-Pycrolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-6-(3-methoxyphenyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 587857-98-5 CAPLUS CN 1H-Pycrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(4-methoxyphenyl)-4-oxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 587658-03-5 CAPLUS
CN 1H-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 6-(3,4-dimethoxyphenyl)-4,5-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 587858-04-6 CAPLUS CN IH-Pycrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3,4-dimethoxyphenyl)-4,5-dihydro-4-thioxo-(9CI) (CA INDEX NAME)

RN 587858-05-7 CAPLUS
CN HH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-[2,3,4-trimethoxyphenyl)- [SCI] (CA INDEX NAME)

RN 587858-06-8 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587858-07-9 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-thioxo-6-(3,4,5-trimethoxyphenyl) - (SCI) (CA INDEX NAME)

RN 587858-08-0 CAPLUS
CN IH-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 6-(2-formylphenyl)-4,5-dihydro4-oxo-(9C1) (CA INDEX NAME)

RN 587858-09-1 CAPLUS
CN HH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3-formylphenyl)-4,5-dihydro4-oxo- (9CI) (CA INDEX NAME)

RN 587858-10-4 CAPLUS
CN HH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(4-formylphenyl)-4,5-dihydro4-oxo- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587858-15-9 CAPLUS
CN 1H-Pycrolo[3, 2-d]pycimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 587858-16-0 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-[3,5-bis(ctrifluoromethyl)phenyl]-4,5-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 587858-17-1 CAPLUS
CN HH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2-acetylphenyl)-4,5-dihydro4-oxo-(9C1) (CA INDEX NAME)

RN 597858-18-2 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3-acetylphenyl)-4,5-dihydro4-oxo- (9Ci) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 587858-11-5 CAPLUS
CN Benzoic acid, 3-(7-cyano-4,5-dihydro-4-oxo-1H-pycrolo[3,2-d]pyrimidin-6-yl)-(9C1) (CA INDEX NAME)

RN 597858-12-6 CAPLUS
CN Benzoic acid, 4-{7-cyano-4,5-dihydro-4-oxo-lH-pyrrolo[3,2-d]pyrimidin-6-y1)-(9C1) (CA INDEX NAME)

RN 587858-13-7 CAPLUS
CN HH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-[2-(trifluoromethyl)phenyl]- (SCI) (CA INDEX NAME)

RN 587858-14-8 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-[3-(trifluoromethyl]phenyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587858-19-3 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(4-acetylphenyl)-4,5-dihydro4-oxo- (9CI) (CA INDEX NAME)

RN 587858-20-6 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-[3-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 587858-21-7 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 587858-22-8 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3-cyanophenyl)-4,5-dihydro4-oxo-(9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

NH CN

RN 587858-23-9 CAPLUS
CN IH-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 6-(4-cyanophenyl)-4,5-dihydro4-oxo-(9C1) (CA INDEX NAME)

H H CN

RN 597858-24-0 CAPLUS
CN HH-Pyrcolo(3,2-d)pyrimidine-7-carbonitrile, 6-(3-aminophenyl)-4,5-dihydro4-oxo-(9C1) (CA INDEX NAME)

NH2

RN 587858-25-1 CAPLUS
CN 1H-Pycrolo[3,2-d]pycimidine-7-carbonitrile, 6-[4-(dimethylamino)phenyl]4,5-dihydro-4-oxo- (9C1) (CA INDEX NAME)

N H N NMe2

RN S87858-26-2 CAPLUS
CN IH-Pyrroio[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(3-nitrophenyl)4-0x0-(9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Co

CH2-OH

RN 587858-31-9 CAPLUS
CN L-Phenylalanine, 4-(7-cyano-4,5-dihydro-4-oxo-lH-pyrrolo[3,2-d]pyrimidin-6yl)- (9Cl) (CA INDEX NAME)

Absolute stereochemistry

S CO26

RN 587858-32-0 CAPLUS
CN 1H-Pycrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-[4-(methylthio)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

SMe

RN 587858-33-1 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-[4-(ethylsulfonyl)phenyl]4,5-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 597859-34-2 CAPLUS
CN IH-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-(4-phenoxyphenyl)- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

N H NO2

RN 587858-27-3 CAPLUS
CN IH-Pycrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(3-nitrophenyl)4-thioxo-(9CI) (CA INDEX NAME)

5 H NO2

RN 587858-28-4 CAPLUS
CN 1H-Pycrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(3-hydroxyphenyl)-4-oxo- (9CI) (CA INDEX NAME)

OH CN OH

RN 587858-29-5 CAPLUS
CN IH-Pyrrolo[3,2-d]pycimidine-7-carbonitrile, 4,5-dihydro-6-[3-(hydroxymethyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

CH2-OH

RN 587858-30-8 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-[4-(hydroxymethyl)phenyl]-4-οκο- (9C1) (CA INDEX NAME)

1.16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

OPh CN

RN 587858-35-3 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(4-phenoxyphenyl)-4-thioxo- (9CI) (CA INDEX NAME)

S H OPh

RN 587858-36-4 CAPLUS
CN 1H-Pycrolof(3,2-d)pycimidine-7-carbonitrile, 6-(1,3-benzodioxol-5-yl)-4,5-dihydro4-oxo-(9C1) (CA INDEX NAME)

RN 587858-37-5 CAPLUS
CN IH-Pycrolo[3,2-d]pyrimidine-7-carbonitrile, 6-[1,1'-biphenyl]-4-yl-4,5-dihydco-4-oxo-(9CI) (CA INDEX NAME)

Ph

RN 587858-38-6 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(4-dibenzofuranyl)-4,5-dibydro-4-oxo-(9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

HN H

RN 587858-39-7 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(2-naphthalenyl)4-oxo-(9CI) (CA INDEX NAME)

RN 587858-40-0 CAPLUS
CN IH-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-6-(1-naphthalenýl)4-oxo-(9C1) (CA INDEX NAME)

RN 587858-41-1 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-(9-phenanthrenyl)- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587858-46-6 CAPLUS
CN IH-Fyrrol0[3,2-d]pyrimidine-7-carbonitrile, 6-(5-acetyl-2-thienyl)-4,5-dihydro-4-oxo-(9C1) (CA INDEX NAME)

N H S AC

RN 587858-47-7 CAPLUS
'CN HH-Pyccolo[3,2-d]pycimidine-7-carbonitrile, 6-(2-benzofuranyl)-4,5-dihydro4-oxo-(9C1) (CA INDEX NAME)

N H CN

RN 587858-48-8 CAPLUS
CN IH-Fyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-benzo[b]thien-2-y1-4,5-dihydro-4-oxo- [9C1] (CA INDEX NAME)

N S CN

RN 587858-49-9 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-benzo(b]thien-3-yl-4,5-dihydro-4-oxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continue

CN HN

RN 587858-42-2 CAPLUS
CN HH-Pyrroloi3,2-d|pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-(2-thienyl)- (9C1) (CA INDEX NAME)

H S

RN 587858-43-3 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(2-thienyl)-4-thioxo- (9CI) (CA INDEX NAME)

S H S CN

RN 587858-44-4 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-(3-thi-ey)l- (9Cl) (CA INDEX NAME)

N H CN

RN 587858-45-5 CAPLUS CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(5-methyl-2-thienyl)-4-oxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

N S S

RN 587858-50-2 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-methyl-4-oxo-6-(phenylmethyl)- (9CI) (CA INDEX NAME)

CH2-Ph

RN 587858-51-3 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4.5-dihydro-5-methyl-6-(phenylmethyl)-4-thioxo- (9CI) (CA INDEX NAME)

CN CH2-Ph

RN 587858-52-4 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5,6-dimethyl-4-oxo(9CI) (CA INDEX NAME)

H CN Me

RN 587858-53-5 CAPLUS
CN IH-Pyrroloi3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-phenyl-5-propyl-(9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CN Ph

RN 587858-54-6 CAPLUS
CN IH-Pyrrolo(3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-4-oxo-5-propyl-(9CI) (CA INDEX NAME)

CN Me

RN 587858-55-7 CAPLUS
CN H-Pyrcoloj,2-djpyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-5-propyl4-thioxo- (9CI) (CA INDEX NAME)

CN Me

RN S87859-56-8 CAPLUS
CN IH-Pyrrolo[3],2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(2-methylpropyl)4-oxo-6-phenyl- (9C1) (CA INDEX NAME)

CN Ph

RN 587858-57-9 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-5-(2-methylpropyl)-4-oxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) methylbutyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 587858-62-6 CAPLUS
CN H-Pyrcol(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-5-(3-methylbutyl)-4-thioxo- (9CI) (CA INDEX NAME)

CN Me CH2- CH2- CHMe2

RN 597858-63-7 CAPLUS
CN 1H-Pycrolo[3,2-d]pycimidine-7-carbonitrile, 4,5-dihydro-5-(2-methylbutyl)4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

Ph Me CH2-CH-EI

RN 587858-64-8 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(2-methylbutyl)-6-phenyl-4-thioxo-(9CI) (CA INDEX NAME)

CN Ph

RN 597858-65-9 CAPLUS .

CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-5-(2-methylbutyl)-4-oxo-(9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

H Me

RN 587858-58-0 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-5-(2-methylpropyl)-4-thioxo-(9CI) (CA INDEX NAME)

H N Me

RN 587858-59-1 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(3-methylbutyl)-4-oxo-6-phenyl- (9Cl) (CA INDEX NAME)

RN 587858-60-4 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(3-methylbutyl)-6-phenyl-4-thioxo-(9C1) (CA INDEX NAME)

Ph CH2- CH2- CHMe2

RN 587858-61-5 CAPLUS
CN 1H-Pycrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-5-(3-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Me Me CH2-CH-E

RN 587858-66-0 CAPLUS
CN H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2,2-dimethylpropyl)-4,5-dihydro4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

CN Ph .

RN 587858-67-1 CAPLUS

N H-Pyrciol[3,2-d]pycimidine-7-carbonitrile, 5-(2,2-dimethylpropyl)-4,5-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

Ph CH2-CMe3

RN 587858-68-2 CAPLUS
CN | H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(2-methylpropyl)-4-oxo-5-pentyl- (9CI) (CA INDEX NAME)

EN Bu-i (CH2) 4-Me

RN 587858-69-3 CAPLUS
CN 1H-Pytrol(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-5-pentyl-6(phenylmethyl) - (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CH2-Ph

RN 587858-70-6 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-5-pentyl-6-phenyl- (9C1) (CA INDEX NAME)

CN Ph

RN 597858-71-7 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-pentyl-6-phenyl4-thiowo- (9CI) (CA INDEX NAME)

Ph (CH<sub>2</sub>) 4-Me

RN 587858-72-8 CAPLUS
CN 1H-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-4-oxo-5-pentyl- (9CI) (CA INDEX NAME)

H Me Me (CH<sub>2</sub>)<sub>4</sub>-Me

RN 587858-73-9 CAPLUS

1H-Pycrolo[3,2-d]pycimidine-7-carbonitrile, 4,5-dihydro-6-methyl-5-pentyl-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued methyl-4-oxo- (9CI) (CA INDEX NAME)

RN 587858-79-5 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(3-aminopropyl)-4,5-dihydro-4-oxo-6-phanyl-, monohydrochloride (9C1) (CA INDEX NAME)

• HCl

RN 587858-80-8 CAPLUS
CN IH-Pyccold[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(2-methoxyethyl)4-oxo-6-phenyl- (9C1) (CA INDEX NAME)

Ph CH2- CH2- OMe

RN 587858-81-9 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(2-methoxyethyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

Ph CH2-CH2-OMe

RN 587858-82-0 CAPLUS Page 43

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

H Me Me (CH<sub>2</sub>) 4-Me

RN 587858-74-0 CAPLUS
CN IH-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 5-(3,3-dimethylbutyl)-4,5-dihydro-4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

RN 587858-75-1 CAPLUS
CN IH-Pycrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(3,3-dimethylbutyl)-4,5-dihydro-6-phenyl-4-thioxo-(9CI) (CA INDEX NAME)

Ch<sub>2</sub>-Ch<sub>2</sub>-Ch<sub>2</sub>-Ch<sub>2</sub>

RN 587858-76-2 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-cyclopropyl-4,5-dihydro-4oxo-6-phenyl- [9C1] (CA INDEX NAME)

H N Ph

RN 587858-77-3 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-cárbonitrile, 5-cyclopropyl-4,5-dihydro-6-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN | 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(2-methoxyethyl)-6-methyl-4-oxo- (9CI) (CA INDEX NAME)

RN 587858-83-1 CAPLUS
CN IH-Pyrcoloj3,2-djpyrimidine-7-carbonitrile, 5-(2-ethoxyethyl)-4,5-dihydro4-oxo-6-phenyl- (9Cl) (CA INDEX NAME)

N 587858-84-2 CAPLUS
N 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-ethoxyethyl)-4,5-dihydro-6-phenyl-4-thioxo- (9C1) (CA INDEX NAME)

N 587858-85-3 CAPLUS
N IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-ethoxyethyl)-4,5-dihydro-6-methyl-4-oxor (9CI) (CA INDEX NAME)

RN 597858-86-4 CAPLUS
CN HH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(3-methoxypropyl)-6-(2-methylpropyl)-4-oxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

T 587858-87-5P 587858-88-6P 587858-89-7P 587858-93-1P 587858-91-1P 587858-92-2P 587858-93-1P 587858-91-1P 587858-92-2P 587858-93-1P 587858-91-1P 587858-92-2P 587858-93-1P 587858-94-4P 587858-95-8P 587858-96-6P 587858-90-1P 587859-01-5P 587859-00-5P 587859-00-5P 587859-00-5P 587859-00-5P 587859-01-6P 587859-01-6P 587859-01-6P 587859-11-8P 587859-11-8P 587859-11-8P 587859-11-9P 587859-11-P 587859-11-P

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

(CH<sub>2</sub>) 3-OHe

RN 587858-89-7 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(3-methoxypcopy)1-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587858-90-0 CAPLUS
CN HH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(3-methoxypropyl)-6-methyl-4-oxo- (9CI) (CA INDEX NAME)

RN 587858-91-1 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(3-methoxypropyl)-6-methyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587858-92-2 CAPLUS
CN 1H-Pycrolo[3,2-d]pycimidine-7-carbonitrile, 5-(3-ethoxypropyl)-4,5-dihydro-6-(2-methylpropyl)-4-oxo-(9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
587860-26-2P \$87860-27-3P \$87860-28-4P
\$87860-29-5P \$87860-30-8P \$87860-31-2P
\$87860-32-0P \$87860-33-1P \$87860-34-2P
\$87860-32-0P \$87860-33-1P \$87860-34-2P
\$87860-31-8P \$87860-39-7P \$87860-34-2P
\$87860-31-1P \$87860-39-7P \$87860-40-0P
\$87860-41-1P \$87860-39-7P \$87860-43-3P
\$87860-41-1P \$87860-42-2P \$87860-43-3P
\$87860-44-4P \$87860-43-5P \$87860-43-7P
\$87860-50-2P \$87860-63-8P \$87860-49-9P
\$87860-50-2P \$87860-51-3P \$87860-65-5-7P
\$87860-50-2P \$87860-54-6P \$87860-65-7P
\$87860-56-8P \$87860-54-6P \$87860-61-5P
\$87860-62-6P \$87860-63-7P \$87860-61-5P
\$87860-63-2P \$87860-60-4P \$87860-61-5P
\$87860-63-2P \$87860-60-4P \$87860-67-1P
\$87860-63-2P \$87860-69-7P \$87860-67-1P
\$87860-71-0P \$87860-71-7P \$87860-71-7P
\$87860-71-0P \$87860-71-8P \$87860-71-9P
\$87860-71-0P \$87860-71-9P
\$87860-71-0P \$87860-71-9P
\$87860-80-1P \$87860-80-4P \$87860-80-79-5P
\$87860-80-1P \$87860-91-1P \$87860-91-1P
\$87860-80-1P \$87860-91-1P \$87860-91-1P
\$87860-80-1P \$87860-91-1P \$87860-91-1P
\$87860-92-2P \$87860-93-3P \$87860-91-1P
\$87860-93-7P \$87860-93-9P \$87860-91-1P
\$87860-93-7P \$87860-93-9P \$87860-91-1P
\$87860-93-7P \$87861-03-5P \$87861-03-4P
\$87861-01-6P \$87861-03-5P \$87861-03-4P
\$87861-01-6P \$87861-03-5P \$87861-03-4P
\$87861-01-6P \$87861-03-5P \$87861-03-4P
\$87861-01-6P \$87861-03-5P \$87861-03-4P
\$87861-13-0P \$87861-13-5P \$87861-13-5P
\$87861-13-0P \$

inhibitors)
RN 587858-87-5 CAPLUS
CN 1H-Pyrcolc[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(3-methoxypropyl)-4-oxo-6-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 587858-88-6 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(3-methoxypropyl)-4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587858-93-3 CAPLUS
CN IH-Pyrciol[3,2-d]pyrimidine-7-carbonitrile, 5-(3-ethoxypropyl)-4,5-dihydro4-0xo-6-(phenylmethyl)- [9Cl] (CA INDEX NAME)

RN 587858-94-4 CAPLUS
CN HH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-(3-ethoxypropyl)-4,5-dihydro-6-(phenylmethyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN 587858-95-5 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-(3-ethoxypropyl)-4,5-dihydro4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

RN 587858-96-6 CAPLUS
CN IH-Pycrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(3-ethoxypropyl)-4,5-dihydro-6-phenyl-4-thioxo-(9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN S87858-97-7 CAPLUS
CN IH-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 5-(3-ethoxypropyl)-4,5-dihydro-6-methyl-4-oxo- (9C1) (CA INDEX NAME)

RN 587858-98-8 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(3-ethoxypropyl)-4,5-dihydro-6-methyl-4-thioxor (9C1) (CA INDEX NAME)

RN 587858-99-9 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylethoxy)propyl]-6-(2-methylpropyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 587859-00-5 CAPLUS

(N HH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylpthoxy)propyl]-6-(2-methylpropyl)-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
methylethoxy)propyl]-6-(phenylmethyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN 587859-05-0 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-oxo-6-(2-phenylethyl)- (9CI) (CA INDEX NAME)

RN 587859-06-1 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylethoxy)propyl]-6-(2-phenylethyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN 597859-07-2 CAPLUS
CN IH-Pyrcoloi3,2-djpyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-oxo-6-phenyl- (9C1) (CA INDEX NAME)

RN 587859-08-3 CAPLUS
CN IH-Pyrcolol3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydco-5-[3-(1-methylethoxy)pcopy]1-6-pheny1-4-thioxo- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587859-01-6 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-cyclopropyl-4,5-dihydro-5-[3-(1-methylethoxyl)propyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 587859-02-7 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-cyclopropyl-4,5-dihydro-5-{3-(1-methylethoxylypropyl)-4-thioxo-(9CI) (CA INDEX NAME)

RN 587859-03-8 CAPLUS

HH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methyl)4-hoxy)propyl]-4-oxo-6-(phenylmethyl)- (9C1) (CA INDEX NAME)

$$\bigcap_{N} \bigcap_{N} \bigcap_{N} \bigcap_{(CH_2)} \bigcap_{3-OPr-i}$$

RN 587859-04-9 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587859-09-4 CAPLUS
CN IH-Pyrcoldj3,2-djpyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-5-[3-(1-methylathoxy)propyl)-4-oxo- (9Cl) (CA INDEX NAME)

RN 587859-10-7 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-5-{3-(1-methylethoxy)propyl]-4-thioxo- (9CI) (CA INDEX NAME)

RN 587859-11-8 CAPLUS
CN IH-Pyccoloj,2-djpyrimidine-7-carbonitrile, 4,5-dihydro-5-{3(methylthio)proyl]-4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

RN 587859-12-9 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3(methylthio)propil-6-phenyl-4-thloxo- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continue

Ph (CH<sub>2</sub>) 3- SMe

RN 587859-13-0 CAPLUS
CN 1H-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-5-[3-(methylthio)propyl)-4-oxo- (9CI) (CA INDEX NAME)

CN Me

RN 587859-14-1 CAPLUS CN 5H-Pyrclo[3,2-d]pyrimidine-5-propanenitrile, 7-cyano-1,4-dihydro-4-oxo-6phenyl- [9CI] (CA INDEX NAME)

Ph CH<sub>2</sub>- CH<sub>2</sub>- CN

RN 587859-15-2 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-propanenitrile, 7-cyano-1,4-dihydro-6-phenyl-4-thioxo- (9Cl) (CA INDEX NAME)

Ph CH2-CH2-CN

RN 587859-16-3 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-(cyclopropylmethyl)-4,5-dihydro-4-oxo-6-phenyl- (9CI) (CA !NDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) dihydro-6-methyl-4-oxo- (9CI) (CA INDEX NAME)

RN 587859-21-0 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-(cyclohexylmethyl)-4,5dihydro-6-methyl-4-thioxo- (9C1) (CA INDEX NAME)

RN 587859-22-1 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(1-cyclohexen-1-ylmethyl)4,5-dihydro-4-oxo-6-phenyl- (9CI) (CA INOEX NAME)

RN 587859-23-2 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(1-cyclohexen-1-ylmethyl)4,5-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 597859-24-3 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(1-cyclohexen-1-ylmethyl)4,5-dihydro-6-methyl-4-oxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587859-17-4 CAPLUS
CN H-Pycrolo[3,2-d]pycimidine-7-carbonitrile, 5-(cyclopropylmethyl)-4,5dihydro-6-phenyl-4-thioxo- (9Cl) (CA INDEX NAME)

RN 587859-18-5 CAPLUS
CN IH-Pyrcolo[3, 2-d]pyrimidine-7-carbonitrile, 5-(cyclohexylmethyl)-4,5-dihydro-4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

RN 587859-19-6 CAPLUS
CN HH-Pyrroid(3,2-d)pyrimidine-7-carbonitrile, 5-(cyclohexylmethyl)-4,5-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587859-20-9 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-?-carbonitrile, 5-(cyclohexylmethyl)-4,5-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN .587859-25-4 CAPLUS
CN 1H-Pycrol[3,2-d]pyrimidine-7-carbonitrile, 5-(1-cyclohexen-1-ylmethyl)4,5-dihydco-6-methyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587859-26-5 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-phenyl-5[(tetrahydro-2-furanyl)methyl]- (9CI) (CA INDEX NAME)

RN 587859-27-6 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-phenyl-5[(tetrahydro-2-furanyl)methyl]-4-thioxo- (9CI) (CA INDEX NAME)

RN 587859-28-7 CAPLUS
CN HH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-4-oxo-5-[(tetrahydro-2-furanyl)methyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continue

RN 587859-29-8 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-[2-(1,3-dioxolan-2-y1)ethyl]4,5-dihydro-4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

RN 587859-32-3 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(2-methylpropyl)-.
4-oxo-5-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 587859-33-4 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-cyclopropyl-4,5-dihydro-4-oxo-5-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 587859-35-6 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-cyclopropyl-4,5-dihydro-5-(phenylmethyl)-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued (phenylmethyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN 587859-40-3 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-5-(phenylmethyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN 587859-41-4 CAPLUS
CN 1H-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-phenyl-5-(2-phenylethyl)- (9CI) (CA INDEX NAME)

RN 587859-42-5 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-phenyl-5-(2-phenylethyl)-4-thiowo-(9CI) (CA INDEX NAME)

RN 587859-43-6 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-4-oxo-5-(2-phenylethyl)- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587859-36-7 CAPLUS
N HI-Pycrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-5,6-bis(phenylmethyl)- (9C1) (CA INDEX NAME)

RN 587859-37-8 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-(2-phenylethyl)-5-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 587859-38-9 CAPLUS
CN 1H-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-phenyl-5-(phenylmethyl)- (9C1) (CA INDEX NAME)

RN 587859-39-0 CAPLUS :
CN 1H-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-6-phenyl-5-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587859-44-7 CAPLUS
CN HH-Pyrcrol[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-5-(2-phenylethyl)-4-thioxo- (9C1) (CA INDEX NAME)

RN 587859-45-8 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(2-methylpropyl)4-oxo-5-(3-phenylpropyl)- (9C1) (CA INDEX NAME)

RN 587859-46-9 CAPLUS
CN 1H-Pycrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(2-methylpropyl)5-(3-phenylpropyl)-4-thioxo- (9CI) (CA INDEX NAME)

NN 587859-47-0 CAPLUS CN IH-Pyrrolo(3,2-d)pytimidine-7-carbonitrile, 6-cyclopropyl-4,5-dihydro-5-(3-phenylpropyl)-4-thioxo- (9CI) (CA INDEX NAME) L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587859-48-1 CAPLUS
CN IH-Pyrcoloj3,2-djpyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6(phenylmethyl)-5-(3-phenylpropyl)- (9CI) (CA INDEX NAME)

RN 587859-49-2 CAPLUS
CN IH-Pyrcalo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(2-phenylethyl)-5-(3-phenylpropyl)-4-thioxo-(9C1) (CA INDEX NAME)

RN 587859-50-5 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-phenyl-5-(3-phenylpropyl)- (9CI) (CA INDEX NAME)

RN 587859-51-6 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-phenyl-5-(3-phenylpropyl)-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) phenylethyl)-5-(3-phenylpropyl)- (9CI) (CA INDEX NAME)

RN 587859-56-1 CAPLUS
CN 1H-Pyrcolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-phenyl-5-(4-phenylbutyl)- (9CI) (CA INDEX NAME)

RN 587859-57-2 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2,2-diphenylethyl)-4,5-dihydro-4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

RN 587859-58-3 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2,2-diphenylethyl)-4,5-dihydro-6-phenyl-4-thioxo-(9CI) (CA INDEX NAME)

RN 587859-59-4 CAPLUS CN HH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-bromo-5-{(4chlorophenyl]methyl]-4,5-dihydro-4-oxo- (9CI) (CA INDEX NAME) L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587859-52-7 CAPLUS
CN 1H-Pyrrolo(J,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-4-oxo-5-(3-phenylpropyl)- [9CI] (CA INDEX NAME)

RN S87859-53-8 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-5-(3-phenyl-propyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN 587859-54-9 CAPLUS

RH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-cyclopropyl-4,5-dihydro-4-oxo-5-(3-phenylpropyl)- (9CI) (CA INDEX NAME)

RN 587859-55-0 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-(2-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587859-60-7 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-[(4-fluorophenyl)methyl]-4,5-dihydro-4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

RN 587859-61-8 CAPLUS
CN H-Pyrcol(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-5-{(4-methoxyphenyl)methyl]-4-oxo-6-phenyl- (9Cl) (CA INDEX NAME)

RN 587859-62-9 CAPLUS
CN 1H-Pycrolo(3,2-d)pyrimidine-7-carbonitrile, 5-[2-(4-fluorophenyl)ethyl)-4,5-dihydro-4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

RN 587859-63-0 CAPLUS
CN HH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-[2-[4-chloropheny1]ethyl]4,5-dihydro-4-oxo-6-phenyl- [9C1] (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

Ph Ph C1

RN 587859-64-1 CAPLUS
CN HH-Pyrrolo[3,2-d]pyrimidine;7-carbonitrile; 4,5-dihydro-5-[2-(4-methoxyphenyl)ethyl]-4-oxo-6-phenyl- (9C1) (CA INDEX NAME)

RN 587859-65-2 CAPLUS .
CN IH-Pytroilo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-6-(2-methylpropyl)-4-oxo-5-(2-phenoxyethyl)- (9C1) (CA INDEX NAME)

RN 587859-66-3 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-5-(2-phenoxyethyl)-6-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 587859-67-4 CAPLUS
CN lH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-5-(2-phenoxyethyl)-6-phenyl- (9CI) .(CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) dihydro-6-methyl-4-oxo- (9CI) (CA INDEX NAME)

RN 587859-72-1 CAPLUS
CN IH-Fyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-furanylmethyl)-4,5-dhydro-6-methyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN 587859-73-2 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-phenyl-5(2-thienylmethyl) - (9CI) (CA INDEX NAME)

RN 587859-74-3 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-4-oxo-5-(2-thienylmethyl)- (9CI) (CA INDEX NAME)

RN 587859-75-4 CAPLUS
CN IH-Pyrcoloj,2-djpyrimidine-7-carbonitrile, 4,5-dihydro-5-[(5-methyl-2-furanyl)methyl]-4-0x0-6-phenyl- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587859-68-5 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(2-phenoxyethyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587859-69-6 CAPLUS
CN IH-Fyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-furanylmethyl)-4,5dihydro-4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

RN 587859-70-9 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrilė, 5-(2-furanylmethyl)-4,5dthydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587859-71-0 CAPLUS CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-furanylmethyl)-4,5-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587859-76-5 CAPLUS
CN IH-Pyrclo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-5-[(5-methyl-2-furanyl)methyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 587859-77-6 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-phenyl-5[2-(2-thienyl)ethyl]- (9CI) (CA INDEX NAME)

(%)

IN 587859-78-7 CAPLUS

IN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-phenyl-5-[2-(2-thienyl)ethyl]-4-thioxo- (9CI) (CA INDEX NAME)

RN 587859-79-8 CAPLUS
CN HR-Pycrolo[3,2-d|pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-4-oxo-5[2-(2-thienyl)ethyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587859-80-1 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-phenyl-5-(2-propynyl)- (9CI) (CA INDEX NAME)

RN 587859-81-2 CAPLUS
CN HR-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(2-methylphenyl)-4-thloxo-(9CI) (CA INDEX NAME)

RN 587859-82-3 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(3-methylphenyl)4-thloxo- (9C1) (CA INDEX NAME)

RN 587859-83-4 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3-chlorophenyl)-4,5-dihydro-4-thioxo-[9CI] (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587859-88-9 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2-chlorophenyl)-4,5-dihydro5-[3-[1-methylethoxy]propyl]-4-thloxo- (9C1) (CA INDEX NAME)

RN 587859-89-0 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-ethoxyethyl)-6-(2-fluorophenyl)-4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

# 

RN 587859-90-3 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-ethoxyethyl)-4,5-dihydro-6-(3-methyl-2-furanyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN 587859-91-4 CAPLUS CN HH-Pyrcol(3,2-d)pyrimidine-7-carbonitrile, 5-(2-ethoxyethyl)-4,5-dihydro-6-(3-methyl-2-thienyl)-4-thioxo-(9CI) (CA INDEX NAME)

Page 50

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587859-84-5 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(4-chlorophenyl)-4,5-dihydro-4-thioxo-(9CI) (CA INDEX NAME)

AN 587859-85-6 CAPLUS

CN IH-Pytrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2,3-dichlorophenyl)-4,5-dihydro-4-thioxo- (9C1) (CA INDEX NAME)

RN 587859-86-7 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2,5-dichlorophenyl)-4,5-dihydro-4-thioxoc (9CI) (CA INDEX NAME)

RN 587859-87-8 CAPLUS
CN HH-Pytrol(3, 2-d) pyrimidine-7-carbonitrile, 5-(3-aminopropyl)-4,5-dihydro-6-(2-methylphenyl)-4-oxo-(9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587859-92-5 CAPLUS
CN lH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-{2-{3-(4-methylphenyl)-1,2,4-oxadiazol-5-yl]ethyl]-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587859-93-6 CAPLUS
CN 1H-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 5-[2-[3-(4-fluorophenyl)-1,2,4-oxadiazol-5-yl]ethyl]-4,5-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587859-94-7 CAPLUS
CN IN-Pyrroio[3,2-d]pyrimidine-7-carbonitrile, 5-[2-(2,5-dioxo-1-pyrrolidiny)]ethy]-4,5-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587859-95-8 CAPLUS CN HH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2-chlorophenyl)-4,5-dihydro-5-(3-methoxypropyl)-4-chloxo-(9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

MeO- (CH2) 3
5
C1
N
H
CN

RN 587859-96-9 CAPLUS
CN 1H-PyrFolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2-chlorophenyl)-5-(3-ethoxypropyl)-4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

EtO- (CH2) 3 S C1

RN 587859-98-1 CAPLUS
CN H-Fyrcio[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylpichbxy)propyl]-6-(2-methylphenyl)-4-thioxo-(9CI) (CA INDEX NAME)

i-PrO-(CH2)3 Me

RN 587859-99-2 CAPLUS
CN H-Pyrclo[3,2-d]pyrimidine-7-carbonitrile, 6-(2-fluorophenyl)-4,5-dihydro5-[3-(1-methylethoxy|propyl]-4-thioxo-(9CI) (CA INDEX NAME)

1-PrO- (CH2) 3
S F
N N CN

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

S (CH<sub>2</sub>) 3-OPr-1

RN 587860-04-6 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylethoxy)propyl]-6-(3-methyl-2-furanyl)-4-thioxo-(9CI) (CA INDEX NAME)

S (CH<sub>2</sub>)<sub>3</sub>-OPr-1

RN 587860-05-7 CAPLUS

CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylethoxy)propyl]-6-(3-methyl-2-thienyl)-4-thioxo-(9CI) (CA INDEX NAME)

S (CH2) 3 - OPr-i

RN 597860-06-8 CAPLUS
CN IH-Pytrolo(3,2-d)pytimidine-7-carbonitrile, 6-(3-furanyl)-4,5-dihydro-5-[3-(1-methylethoxy) propyl]-4-thioxo- (9CI) (CA INDEX NAME)

S (CH<sub>2</sub>)<sub>3</sub>-OPr-i

RN 587860-07-9 CAPLUS
CN 1H-Pyccolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2,6-difluorophenyl)-4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587860-00-2 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(3-hydroxyphenyl)-5-[3-(1-methylethoxy)propyl]-4-thioxo-(9CI) (CA INDEX NAME)

i-PrO-(CH2)3

RN 587860-01-3 CAPLUS
CN 1H-Pycrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-{1-methylethoxy)propyl}-6-(2-thienyl)-4-thioxo- (9CI) (CA INDEX NAME)

S (CH2)3-OPr-1

RN 597860-02-4 CAPLUS

HH-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methyl)+chayy)porpyl]-6-(3-thienyl)-4-thioxo-(9CI) (CA INDEX NAME)

S (CH<sub>2</sub>)<sub>3</sub>-OP<sub>r-1</sub>

RN 587860-03-5 CAPLUS
CN IH-Pyrcolo[3,2-d)pyrimidine-7-carbonitrile, 6-(2-furanyl)-4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-thioxo-(9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

1-Pro-(CH2)3 S F N N CN F

RN 587860-08-0 CAPLUS
CN Acetamide, 2-(acetyloxy)-N-[4-[7-cyano-4,5-dihydro-5-[3-[1-methylethoxy]propyl]-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-6-yl]phenyl]-(9CI) (CA INDEX NAME)

1-PrO-(CH<sub>2</sub>) 3 NH-C-CH<sub>2</sub>-OAc

RN 587860-09-1 CAPLUS
Propanoic acid, 3-[[4-[7-cyano-4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-thioxo-1H-pycrolo[3,2-d]pyrimidin-6-yl]phenyl]amino]-3-oxo-, methyl ester (9CI) (CA INDEX NAME)

RN 587860-10-4 CAPLUS
CN Acetamide, N-[4-[7-cyano-4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-thioxoH-pyrrolo[3,2-d]pyrimidin-6-yl]phenyl]-2-(2-methoxyethoxy)- [9CI) (CA
INDEX NAME)

RN 587860-11-5 CAPLUS

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Acetamide, N-[4-[7-cyano-4,5-dihydro-5-[3-(1-methylethoxy)propy]]-4-thioxolH-pyrrolo[3,2-d]pyrimidin-6-yl]phenyl]-2-(dimethylamino)- (9CI) (CA
INDEX NAME)

RN 587860-12-6 CAPLUS
CN Benzoic acid, 4-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipyrimidin-5-yl)propoxy]- (9C1) (CA INDEX NAME)

RN 587860-13-7 CAPLUS
CN Benzole acid, 4-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipyrindin-5-yl)propoxy]-, methyl ester (9C1) (CA INDEX MAME)

RN 587860-14-8 CAPLUS
CN IR-Pyrcolo(3.2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-6-phenyl-5-[3-(2-phenylethoxy)propyl]-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) phenyl-1,2,4-oxadiazol-5-yl)propyl]-4-thioxo- (9C1) (CA INDEX NAME

RN 587860-19-3 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-[3-[3-(4-fluorophenyl)-1,2,4-oxadiazol-5-yl]propyl]-4,5-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587860-20-6 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-phenyl-5-[3-[3-[(propylsulfonyl)methyl]-1,2,4-oxadiazol-5-yl]propyl]-4-thioxo- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & CN & Ph & O & |CH_2| \\ N & & & |CH_2| \\ N & & & |CH_2| \\ \end{array}$$

RN 587860-21-7 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-methyl-6-(2-methylphenyl)-4-thioxo-(9CI) (CA INDEX NAME)

RN 597860-22-8 CAPLUS
CN IH-Pyrcolof3,2-d)pyrimidine-7-carbonitrile, 6-(2-fluorophenyl)-4,5-dihydro5-methyl-4-thioxor (9C1) (CA INDEX NAME)

## Page 52

- L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 587860-15-9 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-[2-(4-morpholinyl)ethoxy]propyl]-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587860-16-0 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-[2-(2-methoxyethoxy)ethoxy]propyl}-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587860-17-1 CAPLUS
CN HH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-[3-{4-methylphenyl)-1,2,4-oxadiazol-5-yl]propyl]-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587860-18-2 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-phenyl-5-[3-(3-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587860-23-9 CAPLUS
CN IH-Pyrrolo(3,2-d]pyrimidine-7-carbonitrile, 6-(2-chlorophenyl)-4,5-dihydro5-methyl-4-thioxor (9C1) (CA INDEX NAME)

RN 587860-24-0 CAPLUS
CN HH-Pyrcolo(3,2-d)pycimidine-7-carbonitrile, 4,5-dihydro-5-methyl-6-(2-thienyl)-4-thioxo-(9CI) (CA INDEX NAME)

RN 587860-25-1 CAPLUS CN IH-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-5-methyl-6-(3thienyl)-4-thioxo-(9CI) (CA INDEX NAME)

RN 587860-26-2 CAPLUS
CN HH-Pyrcolof(3,2-d]pyrimidine-7-carbonitrile, 6-(3-furanyl)-4,5-dihydro-5-methyl-4-thixox-(9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

S Me

RN 587860-27-3 CAPLUS CN H-Pycrol[3,2-d]pycimidine-7-carbonitrile,.6-cyclohexyl-4,5-dihydro-5methyl-4-thioxo-(9CI) (CA INDEX NAME)

RN 587860-28-4 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-methyl-6-(3-methyl-2-furanyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN 587860-29-5 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-methyl-6-(3-methyl-2-thienyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN 587860-30-8 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-[2-chlorophenyl)-4,5-dihydro-5-(phenylmethyl)-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) dihydro-4-thioxo- (9CI) (CA INDEX NAME)

RN '587860-35-3 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-[4-{1,1-dimethylethyl)phenyl]-4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

RN. 587860-36-4 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(4-cyclohexylphenyl)-4,5-dihydro-4-thioxo-(9CI) (CA INDEX NAME)

RN 587860-37-5 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2-fluorophenyl)-4,5-dihydro4-thiowc- (9C1) (CA INDEX NAME)

RN 587860-38-6 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3-fluorophenyl)-4,5-dihydro4-thixos- (9c1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587860-31-9 CAPLUS

1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2-chlorophenyl)-4,5-dihydro5-(2-phenylethyl)-4-thioxo- [9CI] (CA INDEX NAME)

RN 597860-32-0 CAPLUS
CN HH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4.5-dihydro-6-(4-methylphenyl)-4-thiowo-(9c1) (CA INDEX NAME)

RN 587860-33-1 CAPLUS
CN 1H-Pyrrolo(3,2-d]pyrimidine-7-carbonitrile, 6-(2,6-dimethylphenyl)-4,5-dihydro-4-thioxo- (9CI) .(CA INDEX NAME)

RN 587860-34-2 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3,5-dimethylphenyl)-4,5-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 587860-39-7 CAPLUS
CN HH-Pyrcold[3,2-d]pyrimidine-7-carbonitrile, 6-(4-fluorophenyl)-4,5-dihydro-4-thioxo- (9c1) (CA INDEX NAME)

RN 587860-40-0 CAPLUS
CN 1H-Pytrolo[3,2-d]pycimidine-7-carbonitrile, 6-(3,4-dichlorophenyl)-4,5-dihydro-4-thioxo-(9CI) (CA INDEX NAME)

RN 587860-41-1 CAPLUS
CN HH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(3-methoxyphenyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN 587860-42-2 CAPLUS
CN IH-Pyrroloi3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(4-methoxyphenyl)-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

S H CMe

RN 587860-43-3 CAPLUS
CN IH-Pyrrolo(3,2-d]pyrimidine-7-carbonitrile, 6-(2,6-dimethoxyphenyl)-4,5-dihydro4-thioxo-(9C1) (CA INDEX NAME)

MeO H CN OH

RN 587860-44-4 CAPLUS
CN 1H-Pyrc10[3,2-d]pyrimidine-7-carbonitrile, 6-(2,5-dimethoxyphenyl)-4,5-dihydro-4-thioxo-(9CI) (CA INDEX NAME)

S MeO OHe

RN 587860-45-5 CAPLUS
CN lH-Pycrolo[3,2-d]pyrimidine-7-carbonitrile, 4.5-dihydro-4-thioxo-6-(2,3,4-trimethoxyphenyl)- (9CI) (CA INDEX NAME)

S MeO OMe

RN S87860-46-6 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3-formylphenyl)-4,5-dihydro4-thioxo- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587860-51-3 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(4-acetylphenyl)-4,5-dihydro4-thioxo- (9C1) (CA INDEX NAME)

S H Ac

RN 587860-52-4 CAPLUS
CN HH-Pyrcolo[3,2-d]pyriaidine-7-carbonitrile, 4,5-dihydro-4-thioxo-6-[3-(trifluoromethoxy)phenyl]- (9C1) (CA INDEX NAME)

O-CF3

RN 587860-53-5 CAPLUS
CN H-Pyrcol(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-4-thioxo-6-[4-(trifluoromethoxy)phenyl]- (9Cl) (CA INDEX NAME)

5 H 0- CF3

RN 587860-54-6 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3-cyanophenyl)-4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587860-47-7 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-thioxo-6-[3-(trifluoromethyl)phenyl]- (9Cl) (CA INDEX NAME)

RN 587860-48-8 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-thioxo-6-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 587860-49-9 CAPLUS
CN HH-Pyrcoloj3,2-d)pyrimidine-7-carbonitrile, 6-[3,5-bis[ct:fluoromethyl]phenyl]-4,5-dihydro-4-thioxoo- (9CI) (CA INDEX NAME)

RN 587860-50-2 CAPLUS
CN 1H-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 6-(3-acetylphenyl)-4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587860-55-7 CAPLUS
CN 1H-Pycrolo(3,2-d)pycimidine-7-carbonitrile, 6-[4-(dimethylamino)phenyl]4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

RN 587860-56-8 CAPLUS
CN HH-Pytrol[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-[3-(hydroxymethyl)phenyl]-4-thioxo-[9CI] (CA INDEX NAME)

RN 587860-57-9 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-[4-(hydroxymethyl]phenyl]-4-thioxo- (9CI) (CA INDEX NAME)

RN 587860-58-0 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-[4-(methylthio)phenyl]-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

587860-59-1 CAPLUS.

1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-[4-(ethylsulfonyl)phenyl]-4,5-dihydro-4-chioxo- (9C1) (CA INDEX NAME)

587860-60-4 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(1,3-benzodioxol-5-yl)-4,5-dihydro-4-thioxo-(9CI) (CA INDEX NAME)

587860-61-5 CAPLUS IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(4-dibenzofurany1)-4,5-dihydro-4-thioxo- (9CI) (CA (NDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

597860-65-9 CAPLUS HH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(3-thienyl)-4-thioxo-(9C1) (CA INDEX NAME)

587860-66-0 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(5-methyl-2-thienyl)-4-thioxo- (9CI) (CA INDEX NAME)

587860-67-1 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2-benzofuranyl)-4,5-dihydro-4-thioxo-(9CI) (CA INDEX NAME)

587860-68-2 CAPLUS
Benzoic acid, 3-(7-cyano-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-6-yl)-, ethyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS . COPYRIGHT 2007 ACS on STN

587860-62-6 CAPLUS HH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(2-naphthalenyl)-4-thioxo- (9C1) (CA INDEX NAME)

(Continued)

587860-63-7 CAPLUS 1H-Pyrcol(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-6-(1-naphthalenyl)-4-thioxo-(9CI) (CA INDEX NAME)

587860-64-8 CAPLUS
1H-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-6-(9-phenanthreny1)-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

58786-69-3 CAPLUS 11H-6Y-Frolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3-fluoro-4-methylphenyl)-4,5-dihydro-4-thioxo- (9Cf) (CA INDEX NAME)

587860-70-6 CAPLUS
1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3,4-difluorophenyl)-4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

587860-71-7 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3,5-difluocophenyl)-4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

587860-72-8 CAPLUS

1H-Pyrcnol(3,2-d)pyrimidine-7-carbonitrile, 6-(2,4-difluorophenyl)-4,5-dihydro-4-thioxo-(9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

(Continued)

RN 587860-73-9 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2,3-difluorophenyl)-4,5-dihydro4-thioxo-(9CI) (CA INDEX NAME)

RN 587860-74-0 CAPLUS
CN Benzamide, 3-(7-cyano-4,5-dihydro-4-thioxo-lH-pyrrolo[3,2-d]pyrimidin-6-yl)-M,M-dimethyl- (9Cl) (CA INDEX NAME)

RN 587860-75-1 CAPLUS
CN HH-Pyrrolo[3],2-d]pyrimidine-7-carbonitrile, 6-[3-(dimethylamino)phenyl]4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

RN 587860-76-2 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrinidine-7-carbonitrile, 6-{4-ethoxyphenyl}-4,5-dihydro-4-thioxo-(9c1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

RN 587860-81-9 CAPLUS
CN HH-Pyrcolof(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-6-[3-(methylthio)phenyl]-4-thioxo- (SCI) (CA INDEX NAME)

RN 587860-82-0 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2-fluoro-3-methoxyphenyl)-4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

RN 587860-83-1 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(5-chloro-2-methylphenyl)4,5-dihydro-4-thioxo-(9CI) (CA INDEX NAME)

RN 587860-84-2 CAPLUS'
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(5-chloro-2-methoxyphenyl)-4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587860-77-3 CAPLUS CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-[2-(methow)methyl]phenyl]-4-thioxo- (9CI) (CA INDEX NAME)

RN 587860-78-4 CAPLUS
CN 1H-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-6-[3(methowymethyl)phenyl]-4-thioxo- (9CI) (CA INDEX NAME)

RN 587860-79-5 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-[4-(methoxymethyl]phenyl]-4-thioxo- (9CI) (CA INDEX NAME).

RN 587860-80-8 CAPLUS
CN 1H-Pycrol[3],2-d]pycimidine-7-carbonitrile, 4,5-dihydro-6-(2-methoxy-5-methylphenyl)-4-thioxo-(9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587860-85-3 CAPLUS
CN HR-Pycrolo(3,2-d)pycimidine-7-carbonitrile, 6-(4-fluoro-2-methylphenyl)4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

RN 587860-86-4 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3-fluoro-2-methylphenyl)4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

N 587860-87-5 CAPLUS
N H-Pycrolo[3,2-d] pycimidine-7-carbonitrile, 6-(5-fluoro-2-methylphenyl)-4,5-dihydro-4-chioxo- (9CI) (CA INDEX NAME)

RN 587860-88-6 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(4-methoxy-2-methylphenyl)-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587860-89-7 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3,5-dichlorophenyl)-4,5-dihydro-4-thioxo-(9CI) (CA INDEX NAME)

RN 587860-90-0 CAPLUS
CN IH-Fyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2-ethylphenyl)-4,5-dihydro4-thiowo- (9C1) (CA INDEX NAME)

RN 597860-91-1 CAPLUS
CN IH-Pyrroloi3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(4-methyl-2-thienyl)-4-thioxo-(9CI) (CA INDEX NAME)

RN 587860-92-2 CAPLUS
CN IH-Pytrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(3-pyridinyl)-4-thioxo-(9Cl) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587860-97-7 CAPLUS CN HI-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-methyl-6-(2-methyl-phenyl)-4-owo- (9CI) (CA INDEX NAME)

RN 587860-98-8 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-cyclohexyl-4,5-dihydro-5-methyl-4-oxo- (9CI) (CA INDEX NAME)

RN 587860-99-9 CAPLUS
CN HI-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-6-phenyl-5-(3-(phenylmetoxy)propyl)- (SC1) (CA INDEX NAME)

RN 587861-00-5 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(3-methoxypropyl)-6-(4-methylphenyl)-4-oxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587860-93-3 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(5-methoxy-2-methylphenyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN 587860-94-4 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(4-morpholiny1)propy1]-6-pheny1-4-thioxo- (9CI) (CA INDEX NAME)

RN 587860-95-5 CAPLUS
CN IH-Pyrcolo(3,2-d)pyrimidine-7-carbonitrile, 6-cyclopropyl-4,5-dihydro-5-(2-propenyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN 587860-96-6 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2,6-difluorophenyl)-4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-oxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587861-01-6 CAPLUS
'CN IH-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-5-methyl-6-(4-methylphenyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 587861-02-7 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylphenyl)-4-oxo- (9Ci) (CA INDEX NAME)

RN 587861-03-8 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(2-ethoxyethyl)-4,5-dihydro-6-(4-methylphenyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 587861-04-9 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(4-methylphenyl)4-oxo-5-(2-phenylethyl)- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continu

Ph-CH2-CH2

RN 587861-05-0 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(4-methylphenyl)4-oxo-5-(phenylnethyl)- (9CI) (CA INDEX NAME)

Ph-CH<sub>2</sub>

RN 587861-06-1 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-bromo-4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-oxo- (9CI) (CA INDEX NAME)

CN Bc (CH2) 3-OPc-i

RN 587861-07-2 CAPLUS
CN 1H-Pyrcolo(3,2-d]pyrimidine-7-carbonitrile, 6-[3,5-bis(phenylmethoxy)phenyl]-4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-oxo-(9C1) (CA INDEX NAME)

i-PrO-(CH<sub>2</sub>) 3 O-CH<sub>2</sub>-Ph

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

 $\bigcap_{N = 1}^{H} \bigcap_{N = CH_2 - CH_2 - NH - C}^{CN} \bigcap_{C1}^{Ph} \bigcap_{N = 1}^{N} \bigcap_{C1}^{C1} \bigcap_{C1}^{C1$ 

RN 587861-12-9 CAPLUS
CN Benzamide, 4-chloro-N-[2-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- {9CI} (CA INDEX NAME)

Ph Ph Ph Ph CH2-CH2-NH-C

RN 587861-13-0 CAPLUS
CN Benzamide, 4-cyano-N-[2-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl}- (9CI) (CA INDEX NAME)

CN Ph 0 CN CN CN CN

RN 587861-14-1 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-3-nitro- (9CI) (CA INDEX NAME)

Ph O NO2

RN 587861-15-2 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pycrolo[3,2-d]pycimidin-5-yl)ethyl]-4-nitro- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587861-08-3 CAPLUS
CN HH-Fyrclo[3,2-d]pycimidine-7-carbonitrile, 4,5-dihydro-5-(3-methoxypropyl)-6-(2-methylphenyl)-4-oxo- (9CI) (CA INDEX NAME)

MeO- (CH2) 3

RN 587861-09-4 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-phenyl-5-[3-(phenylmethoxy)propyl]-4-thioxo- (9CI) (CA INDEX NAME)

Ph (CH<sub>2</sub>) 3- 0- CH<sub>2</sub>- Ph

RN 587861-10-7 CAPLUS
CN 1H-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 5-(3-ethoxypropyl)-4,5-dihydro-6-(2-methylphenyl)-4-thioxo- (9CI) (CA INDEX NAME)

EtO- (CH2) 3
S
N
N
N
CN

RN 587861-11-8 CAPLUS
CN Benzamide, 3-chloro-N-[2-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Ph NO2

AN 587861-16-3 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-4-oxo-6-phanyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-4-methoxy- (9CI) (CA INDEX NAME)

CN Ph 0 OMe

RN 587861-17-4 CAPLUS
CN Benzoic acid, 4-[[[2-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

CN Ph CH2-CH2-NH-C C-OME

RN 587861-18-5 CAPLUS
CN 2-Fucancarboxamide, N-[2-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pycrol6[3,2-d]pyrimidin-5-yl)ethyll- (9C1) (CA INDEX NAME)

CN Ph II CH2-CH2-NH-C

RN 587861-19-6 CAPLUS
CN 2-Thiophenecarboxamide, N-[2-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587861-20-9 CAPLUS
3-Pyridinecarboxamide, N-[2-(7-cyano-1,4-dihydro-4-oxo-6-ph
pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

587861-21-0 CAPLUS 4-Pyridinecarboxanide, N-[2-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

597861-22-1 CAPLUS 2-Furancarboxamide, N-(2-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pycrolo(3,2-d)pyrimidin-5-yl)ethyl)-5-nitro-(9CI) (CA INDEX NAME)

587861-23-2 CAPLUS 4-Isoxazoleaziokamide, N-(2-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-3,5-dimethyl- (9CI) (CA INDEX NAME)

(Uses) (drug candidate; prepn. of pyrrolopyrimidine derivs. as GSK-3

Inhibitors of proping of pythology inhibitors inhibitors of pythology inhibito

Page 59

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587861-24-3 CAPLUS 2-Thiophenecarboxanide, 5-[(4-chlorophenyl)sulfonyl)-N-[2-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-3-methyl-(9CI) (CA INDEX NAME)

ΙT

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587861-26-5 CAPLUS Cyclopentanecarboxamide, N-[3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pytrolo[3,2-d]pytimidin-5-yl)propyl]- (9CI) (CA INDEX NAME)

597861-27-6 CAPLUS Benzamide, N-[3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl)propyl]- (9CI) (CA INDEX NAME)

587861-28-7 CAPLUS
Benzamide, 2-chloro-N-[3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pycrolo[3,2-d]pyrimidin-5-yl]propyl]- (9CI) (CA INDEX NAME)

S87861-29-8 CAPLUS
Benzamide, 3-chloro-N-[3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pycrolo[3,2-d]pyrimidin-5-yl)propyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587861-30-1 CAPLUS

Senzamide, 4-chloro-N-[3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d)pyrindin-5-yl)propyl]- (9C1) (CA 1NDEX NAME)

RN 587861-31-2 CAPLUS
CN Benzamide, 4-cyano-N-[3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl)propyl]- (9Cl) (CA INDEX NAME)

RN 587861-32-3 CAPLUS
CN Benzamide, N-[3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-y1)propyl]-2-nitro- (9CI). (CA INDEX NAME)

RN 587861-33-4 CAPLUS
CN Benzamide, N-[3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrcolo[3,2-dipyriadidn-5-yl)propyl]-3-nitro- (9Cl) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN S97861-37-8 CAPLUS
CN 4-Pyridinearboxamide, N-[3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrcolo[3,2-d]pyrimidin-5-yl)propyl]- (9Cl) (CA INDEX NAME)

RN 587861-38-9 CAPLUS
CN 4-Isoxazolecarboxamide, N-[3-(7-cyano-1,4-dihydco-4-oxo-6-phenyl-5H-pyrcol(3,2-d)pyrimdin-5-yl)propyl]-3,5-dimethyl- (9C1) (CA INDEX NAME)

RN 587861-39-0 CAPLUS
CN Benzeneacetamide, N-[3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-y1)propyl]-4-fluoro- (9CI) (CA INDEX NAME)

RN 597861-40-3 CAPLUS

'CN 2-Thiopheneacetamide, N-[3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pycrolo[3,2-d]pyrimidin-5-yl)propyl]- (9CI) (CA INDEX NAME)

RN S87861-41-4 CAPLUS Enzenepropanamide, 4-chloro-N-[3-(7-cyano-1, 4-dihydro-4-oxo-6-phenyl-5H-Page 60

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587861-34-5 CAPLUS CN Benzamide, N-[3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-y1)propyl]-4-nitro- (9CI) (CA INDEX NAME)

RN 587861-35-6 CAPLUS

Rn Senzoic acid, 4-[[[3-{7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl)propyl)amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

RN 587861-36-7 CAPLUS
CN 3-Pyridinecarboxamide, N-(3-(7-cyano-1,4-dibydro-4-oxo-6-phenyl-5H-pyrrold), 2-d]pyrimidin-5-yl)propyl]- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) pyrcolo[3,2-d]pyrimidin-5-yl)propyl]- $\alpha$ ,  $\alpha$ -dimethyl- (9CI) (CA INDEX NAME)

RN 587861-42-5 CAPLUS
CN Carbamic acid. [3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-dlpyrimidin-5-yl)propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 587861-43-6 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-[2-(acetyloxy)ethyl]-4,5dihydro-4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

RN 587861-44-7 CAPLUS
CN Benzoic acid, 3-chloro-, 2-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl ester (9CI) (CA INDEX NAME)

RN 587861-45-8 CAPLUS
CN 1,4-Benzenedicarboxylic acid, 2-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5Hpytrolo[3,2-d]pytimidin-5-yl]ethyl methyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587861-46-9 CAPLUS
CN HH-Pyrcno[3,2-d]pyrimidine-7-carbonitrile, 5-{3-(acetyloxy)propyl]-4,5-dihydro-4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

RN 587861-47-0 CAPLUS CVclopentanecarboxylic acid, 3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5K-pyrcole[3,2-d]pyrimidin-5-yl)propyl ester (9CI) (CA INDEX NAME)

RN 587861-48-1 CAPLUS
CN IH-Fyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-[3-(benzoyloxy)propyl]-4,5-dihydro4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

RN 587861-49-2 CAPLUS
CN Benzoic acid, 2-chloro-, 3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-[(3-nitrobenzoyl)oxy]propyl]-4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

RN 587861-54-9 CAPLUS
CN IH-Fyrcio[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-[(4-nitrobenzoyl)oxy]propyl]-4-oxo-6-phenyl- (9C1) (CA INDEX NAME)

RN 587861-55-0 CAPLUS
CN Benzoic acid, 4-methoxy-, 3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl)propyl ester (9C1) '(CA INDEX NAME)

RN 587861-56-1 CAPLUS
CN 1,4-Benzenedicarboxylic acid, 3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl)propyl methyl ester (9CI) (CA INDEX NAME)

RN 597861-57-2 CAPLUS CN 2-Furancetooxylic acid, 3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5Hpyrcolo[3,2-d]pyrimidin-5-yl]propyl ester (9CI) (CA INDEX NAME)

Page 61

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) pyrrolo[3,2-d]pyrimidin-5-yl)propyl ester (9CI) (CA INDEX NAME)

RN 587861-50-5 CAPLUS
CN Benzoic acid, 3-chloro-, 3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl)propyl ester (9CI) (CA INDEX NAME)

RN 587861-51-6 CAPLUS
CN Benzoic acid, 4-chloro-, 3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrcol(3,2-d)pyrimidin-5-yl)propyl ester (9CI) (CA INDEX NAME)

RN 587861-52-7 CAPLUS
CN Benzoic acid, 4-cyano-, 3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5Hpycrolo(3,2-d)pycimidin-5-yl)propyl ester (9CI) (CA'TMDEX NAME)

RN 587861-53-8 CAPLUS

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587861-58-3 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrcolo(3,2-d)pyrimidin-5-yl)propyl ester (9CI) (CA INDEX NAME)

RN 587861-59-4 CAPLUS
CN 3-Pyridinecarbowylic acid, 3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl]propyl ester (9CI) (CA INDEX NAME)

RN 587861-60-7 CAPLUS
CN 4-Pyridinecarboxylic acid, 3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo(3,2-d)pyrimidin-5-yl)propyl ester (9C1) (CA INDEX NAME)

RN 587861-61-8 CAPLUS
CN 2-Furancarboxylic acid, 5-nitro-, 3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrclo[3,2-d]pyrimidin-5-yl)propyl ester (9Cl) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 587861-62-9 CAPLUS
CN 4-Isoxazolecarboxylic acid, 3,5-dimethyl-, 3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl)propyl ester (9CI) (CA INDEX NAME)

RN 587861-63-0 CAPLUS
CN Acetamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 597961-64-1 CAPLUS
CN Benzenepropanamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pytrolo[3,2-d]pytimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 587861-65-2 CAPLUS Enzamide, N-[2-{7-cyano-1,4-dihydro-6-(3-methyl-2-furanyl)-4-thioxo-5H-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 587861-69-6 CAPLUS
CN Benzamide, 2-chloro-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-y1)ethyl]- (9CI) (CA INDEX NAME)

RN 587861-70-9 CAPLUS
CN Benzamide, 3-chloro-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

$$\bigcap_{N \to \infty} \bigcap_{N \to \infty} \bigcap_{CH_2-CH_2-NH-C} \bigcap_{C1} \bigcap_{$$

RN 587861-71-0 CAPLUS
CN Benzamide, 4-chloro-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pycimidin-5-y1)ethyl]- (9CI) (CA INDEX NAME)

RN 587861-72-1 CAPLUS
CN Benzamido, »[2-(7-cyano-1,4-dihydro-6-phenyl-4-chioxo-5H-pyrrolo[3,2-d]pyrimidin-5-y]tehyl]-3-(luoro-(9C1) (CA INDEX NAME)

Page 62

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 587861-66-3 CAPLUS
CN Benzamide, N-[2-{7-cyano-1,4-dihydro-6-(3-methyl-2-thienyl)-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9C1) (CA INDEX NAME)

RN 587861-67-4 CAPLUS
CN Benzamide, N-[2-[6-(3-chloro-2-thienyl)-7-cyano-1,4-dihydro-4-thioxo-5H-pyrcol(3,2-d]pyrimidin-5-yl]ethyl]- (9Cl) (CA INDEX NAME)

RN 587861-68-5 CAPLUS
CN Benzamide, N-[2-[7-cyano-1,4-dihydro-6-(1-methyl-lH-pyrrol-2-yl)-4-thioxoSH-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (SCI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587861-73-2 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-2-methyl- (9C1) (CA INDEX NAME)

RN 587861-74-3 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-3-methoxy- (9CI) (CA INDEX NAME)

RN 587861-75-4 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-4-methoxy- (9CI) (CA INDEX NAME)

RN 587861-76-5 CAPLUS
CN Benzamide, N-[2-[7-cyano-1,4-dihydro-6-(3-methyl-2-furanyl)-4-thioxo-5Hpyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-4-methoxy- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587861-77-6 CAPLUS
CN Benzamide, N-[2-[7-cyano-1,4-dihydro-6-(3-methyl-2-thienyl)-4-thioxo-5H-pytrolo[3,2-d]pytrimidin-5-yl]ethyl]-4-methoxy- (9CI) (CA INDEX NAME)

RN 587861-78-7 CAPLUS
CN Benzamide, N-[2-[6-(3-chloro-2-thienyl)-7-cyano-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl}ethyl]-4-methoxy- (9CI) (CA INDEX NAME)

RN 587861-79-8 CAPLUS
CN Benzamide, N-[2-[7-cyano-1,4-dihydro-6-(1-methyl-1H-pyrrol-2-yl)-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-methoxy- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587861-83-4 CAPLUS
CN Benzamide, 2-amino-N-[2-[6-(3-chloro-2-thlenyl)-7-cyano-1,4-dihydro-4-thloxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl)- (9CI) (CA INDEX NAME)

RN 587861-84-5 CAPLUS
CN Benzamide, 2-amino-N-(2-[7-cyano-1,4-dihydro-6-(1-methyl-1H-pycrol-2-yl)-4-thioxo-5H-pycrol]3,2-d]pyrimidin-5-yl]ethyl]- (9C1) (CA INDEX NAME)

RN S87861-85-6 CAPLUS
CN Benzamide, 2-amino-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-3-methyl- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587861-80-1 CAPLUS CN IH-Pyrrole-3-carboxamide, N-[2-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrol0[3,2-d]pyrimidin-5-yl)ethyl]-1-[{4-methylphenyl}sulfonyl]- (9CI) (CA INDEX NAME)

RN 587861-81-2 CAPLUS
CN Benzamide, 2-amino-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9C1) (CA INDEX NAME)

RN 587861-82-3 CAPLUS
CN Benzamide, 2-amino-N-[2-(7-cyano-1,4-dihydro-6-(3-methyl-2-thienyl)-4-thioxo-5H-pyrcol(3,2-d)pyrimidin-5-yl]ethyl]- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continue

RN 587861-86-7 CAPLUS
CN Benzamide, 2-amino-N-[2-(7-cyano-1, 4-dihydro-6-(3-methyl-2-thienyl)-4-thioxo-5H-pyrrolo(3,2-d)pyrimidin-5-yl]ethyl]-3-methyl- [9CI) (CA INDEX

RN 587861-87-8 CAPLUS
CN Benzamide, 2-amino-N-[2-[6-(3-chloro-2-thieny1)-7-cyano-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-3-methyl- (9CI) (CA INDEX NAME)

RN 587861-88-9 CAPLUS
CN Benzamide, 2-amino-N-[2-[7-cyano-1,4-dihydro-6-(1-methyl-1H-pyrrol-2-yl)-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-3-methyl- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS. on STN (Continued)

RN 587861-89-0 CAPLUS
CN Benzamide, 2-amino-N-{2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pycimidin-5-yl)ethyl]-4-fluoro-(9CI) (CA INDEX NAME)

RN 587861-90-3 CAPLUS
CN Benzamide, 2-amino-N-[2-[7-cyano-1,4-dihydro-6-(3-methyl-2-furanyl)-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-fluoro-(9CI) (CA INDEX NAME)

RN 587861-91-4 CAPLUS
CN Benzamide, 2-amino-N-[2-[7-cyano-1,4-dihydro-6-(3-methyl-2-thienyl)-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-fluoro-(9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587861-95-8 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-y1)ethyl]-2-hydroxy-5-methyl- (9CI) (CA INDEX NAME)

RN 587861-96-9 CAPLUS
CN Benzamide, 3-cyano-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pytrolo[3,2-d]pytrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 587861-97-0 CAPLUS
CN Benzamide, 4-cyano-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pycimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 587861-98-1 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl]-2-hydroxy- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 587861-92-5 CAPLUS
CN Benzamide, 2-amino-N-[2-[6-(3-chloro-2-thienyl)-7-cyano-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-fluoro-(9CI) (CA INDEX NAME)

RN 587861-93-6 CAPLUS

RN Benzamide, 2-amino-N-[2-[7-cyano-1,4-dihydro-6-(1-methyl-1H-pyrrol-2-yl)-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-fluoro-(9CI) (CA INDEX NAME)

RN 587861-94-7 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2-hydroxy-3-methyl- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587861-99-2 CAPLUS
CN Benzamids, N-[2-[7-cyano-1,4-dihydro-6-(3-methyl-2-furanyl)-4-thioxo-5Hpyrcol(3).2-d]pyrimidin-5-yl]ethyl]-4-fluoro-(9CI) (CA INDEX NAME)

RN 587662-00-8 CAPLUS
CN Benzamide, N-[2-[7-cyano-1,4-dihydro-6-(3-methyl-2-thienyl)-4-thioxo-5Hpyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-fluoro- (SCI) (CA INDEX NAME)

RN 587862-01-9 CAPLUS
CN Benzamide, N-[2-[6-(3-chloro-2-thienyl)-7-cyano-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-fluoro- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587862-02-0 CAPLUS
CN Benzamide, N-[2-[7-cyano-1,4-dihydro-6-(1-methyl-1H-pycrol-2-yl)-4-thioxoSH-pyrcolo[3,2-d-]pyrimidin-5-yl]ethyl]-4-fluoro-(9C1) (CA INDEX NAME)

RN 587862-03-1 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2-methoxy- (9Cl) (CA INDEX NAME)

RN 587862-04-2 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thloxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl]-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT, 2007 ACS on STN

RN 587862-09-7 CAPLUS
CN 1,3-Benzodioxole-5-carboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrolo[3,2-d]pyrimidin-5-yl)ethyl]- [9CI) (CA INDEX NAME)

(Continued)

RN 587862-10-0 CAPLUS
CN 1,3-Benzodioxole-5-carboxamide, N-[2-[6-(3-chloro-2-thieny1)-7-cyano-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-y1]ethyl]- (9CI) (CA INDEX NAME)

RN 587862-11-1 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-4-nitro- (9CI) (CA INDEX NAME)

RN 587862-12-2 CAPLUS
CN Benzoic acid, 4-[[[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]amino]carbonyl]- (9CI) (CA INDEX NAME)

Page 65

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 587862-05-3 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

$$\bigcap_{h \to h} \bigcap_{h \to h} \bigcap_{h \to h \to h} \bigcap_{h \to h}$$

RN 587862-06-4 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2-nitro- (9CI) (CA INDEX NAME)

RN 587862-07-5 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-y1)ethyl]-3,5-dimethoxy- (9CI) (CA INDEX NAME)

$$\bigcap_{N \to -CH_2-CH_2-NH-C}^{CN} \bigcap_{OMe}^{OMe}$$

RN 587862-08-6 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-3-nitro- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587862-13-3 CAPLUS
CN Benzoic acid, 4-[[[2-[7-cyano-1,4-dihydro-6-(3-methyl-2-furanyl)-4-thioxo5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]amino]carbonyl]- (9CI) (CA INDEX NAMS)

RN 587862-14-4 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-3-hydroxy- (9CI) (CA INDEX NAME)

RN S87862-15-5 CAPLUS
CN Benzamide, 4-(aminosulfonyl)-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxoSH-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

$$\bigcap_{i=1}^{H} \bigcap_{N=1}^{CN} \bigcap_{i=1}^{Ph} \bigcap_{i=1}^{N} \bigcap_{j=1}^{N} \bigcap$$

RN 587862-16-6 CAPLUS

L16 ANSWER 6 OF 60. CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-4-hydroxy- (9CI) (CA INDEX NAME)

RN 587862-17-7 CAPLUS
CN Benzamide, N-[2-[6-(3-chloro-2-thienyl)-7-cyano-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-hydroxy- (9CI) (CA INDEX NAME)

RN 597862-18-8 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo(3,2-d)pyrimidin-5-y1)ethyl]-4-cyclopentyl- (9CI) (CA INDEX NAME)

RN 587862-19-9 CAPLUS
CN Benzamide, N-[2-[7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yljethyl]-4-methyl- (9C1) (CA INDEX NAME)

(Continued)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

RN 587862-24-6 CAPLUS
CN Benzamide, 4-bromo-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrole(3,2-d)pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 587862-25-7 CAPLUS
CN Benzoic acid, 4-[[[2-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

$$\bigcap_{N = 1}^{H} \bigcap_{N = 1}^{CN} \bigcap_{CH_2 - CH_2 - NH - C} \bigcap_{C = 0}^{N} \bigcap_{C = 0Me}$$

RN 587862-26-8 CAPLUS

CN Benzoic acid, 4-[[[2-[7-cyano-1,4-dihydro-6-[3-methyl-2-thienyl]-4-thioxo5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]amino]carbonyl]-, methyl ester (9CI)
(CA INDEX NAME)

'116 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

$$\bigcap_{h = 1}^{H} \bigcap_{h = 1}^{CN} \bigcap_{h = 1}^{Ph} \bigcap_{h = 1}^{N} \bigcap_{h = 1}^{Me} \bigcap_{h$$

RN 587862-20-2 CAPLUS
CN 2-Thiophenecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrclo[3,2-d]pyrimidin-5-yl)ethyl]-5-methyl- [9CI] (CA INDEX NAME)

$$\begin{picture}(20,0) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){100$$

RN 587862-21-3 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2,4-difluoro- (9CI) (CA INDEX NAME)

RN 587862-22-4 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-3-(trifluoromethoxy)- (9C1) (CA INDEX NAME)

RN 587862-23-5 CAPLUS
CN Benzamide, 2-bromo-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587862-27-9 CAPLUS
CN Benzoic acid, 4-[{[2-[6-(3-chloro-2-thienyl)-7-cyano-1,4-dihydro-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl]ethyl]amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

RN 587862-28-0 CAPLUS

Benzoic acid, 4-[[[2-[7-cyano-1,4-dihydro-6-(1-methyl-1H-pyrrol-2-yl)-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{picture}(20,0) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){100$$

RN 587862-29-1 CAPLUS
CN Benzamide, 3,5-dichloro-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 587862-30-4 CAPLUS
CN 3-Furancarboxamide N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5Hpyrrol[3,2-d]pyrimidin-5-yl)ethyl]-2-methyl- (9CI) (CA INDEX NAME)

RN 587862-31-5 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipyriadin-5-yl)ethyll-3,5-dinitro-(9CI) (CA INDEX NAME)

RN 587862-32-6 CAPLUS
CN Benzamide, 3,4-dichloro-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d)pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 587862-33-7 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-3,4-dimethoxy-(9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587862-37-1 CAPLUS
CN Benzamide, N-[2-[7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipyrimidin-5-yl]ethyl]-2-(trifluoromethyl)- (9C1) (CA INDEX NAME)

RN 587862-38-2 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2,4-dimethoxy- (9CI) (CA INDEX NAME)

RN 587862-39-3 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-5-methyl-2-nitro-(9CI) (CA INDEX NAME)

RN 587862-40-6 CAPLUS
CN Carbamic acid, [2-[[[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pycimidin-5-yl]ethyl]amino[carbonyl]phenyl]-, l,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continue

RN 587862-34-8 CAPLUS
CN Benzamide, N-[2-[6-(3-chloro-2-thieny1)-7-cyano-1,4-dihydro-4-thioxo-5H-pyrclo[3,2-d]pyrimidin-5-y1]ethyl]-3,4-dimethoxy- [9CI) (CA INDEX NAME)

RN 587862-35-9 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yllethyl]-2,6-dimethoxy- (9CI) (CA INDEX NAME)

RN 587862-36-0 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2-fluoro- (9CI) (CA INDEX NAME)

1.16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587862-41-7 CAPLUS
CN Benzamide, N-[2-[7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrlmidin-5-yl]ethyl]-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

RM 587862-42-8 CAPLUS
CN Benzamide, 4-(acetylamino)-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo(3,2-d)pyrindin-5-yl)ethyl]- (9C1) (CA INDEX NAME)

RN 587862-43-9 CAPLUS
CN Benzamide, 4-(acetylamino)-N-[2-[6-(3-chloro-2-thienyl)-7-cyano-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAMP)

RN 587862-44-0 CAPLUS .
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN. (Continued) d]pyrimidin-5-yl)ethyl]-2,4-dihydroxy- (9CI) (CA INDEX NAME)

RN 587862-45-1 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)tethyl]-2,6-dihydroxy- (9Cl) (CA INDEX NAME)

RN 587862-46-2 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2-(methylamino)- (9C1) (CA INDEX NAME)

RN 597862-47-3 CAPLUS.
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-thyl]-2-(dimethylamino)- (901) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587862-52-0 CAPLUS
CN Benzamide, 5-acetyl-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2-hydroxy- (9CI) (CA INDEX NAME)

RN 587862-53-1 CAPLUS

Benzamide, S-chloro-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2-nitro- (9CI) (CA INDEX NAME)

RN 587862-54-2 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-4-(methylthio)- (9CI) (CA INDEX NAME)

RN 587862-55-3 CAPLUS
CN Benzamide, 3-(acetylamino)-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pycimidin-5-y1)ethyl}- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587862-48-4 CAPLUS

CN Benzamide, 2-(acetylamino)-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

CN Ph ON CH2-CH2-NH-C

RN 587862-49-5 CAPLUS
CN Benzamide, 5-(acetylamino)-2-amino-N-[2-(7-cyano-1,4-dihydco-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 587862-50-8 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydco-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl-tehyl]-4-(methylamino)- (9CI) (CA INDEX NAME)

RN 587862-51-9 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrindin-5-yl)ehyl]-2-methyl-6-nitro-(9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587862-564 CAPLUS
CN Benzamida, 3-bcomo-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrole(3,2-d)pyrimidin-5-yl)ethyl)- (9CI) (CA INDEX NAME)

RN 587862-57-5 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yllethyl]-2,5-difluoro-(9CI) (CA INDEX NAME)

RN 587862-58-6 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2,4,5-trifluoro- (9CI) (CA INDEX NAME)

RN 587862-59-7 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-djpyriadidn-5-y1)thyl]-2,5-bis(trifluoromethyl)- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587862-60-0 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2-fluoro-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 587862-61-1 CAPLUS
CN Benzamide, N-(2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2-fluoro-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 587862-62-2 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pytrolo[3,2-d]pytriidin-5-yl)ethyl]-2-fluoro-3-(trifluoromethyl)- (9C1) (CA INDEX NAME)

$$\bigcap_{N \to CH_2-CH_2-NH-C} \bigcap_{CF_3}$$

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587862-67-7 CAPLUS
CN Benzamide, N-[2-[7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pycimidin-5-yl)ethyl]-2,3,5,6-tetrafluoro-4-hydroxy- (9CI) (CA INDEX NAME)

$$\bigcap_{N = 1}^{H} \bigcap_{N = 1}^{CN} \bigcap_{N = 1}^{Ph} \bigcap_{N = 1}^{N} \bigcap_{N = 1}^{F} \bigcap_{N = 1}^{$$

RN 587862-68-8 CAPLUS

Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-4-(4,5-dihydro-3-methyl-5-oxo-lH-pyrazol-1-yl)-(9CI) (CA INDEX NAME)

RN 587862-69-9 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-4-(lH-imidazol-1-yl)- (9CI) (CA INDEX NAME)

RN S97862-70-2 CAPLUS
CN Carbamic acid. [4-[[[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrclo[3,2-d]pyrimidin-5-yl)ethyl]amino|carbonyllphenyll-,

Page 69

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587862-63-3 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-4-fluoro-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

$$\bigcap_{h \to \infty} \bigcap_{h \to \infty} \bigcap_{h$$

RN 587862-64-4 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pycimidin-5-yl)ethyl]-4-ethoxy- (9CI) (CA INDEX NAME)

RN 587662-65-5 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-4-hydroxy-3-methoxy- (9CI) (CA INDEX NAME)

$$\bigcap_{N \to \infty} \bigcap_{N \to \infty} \bigcap_{CH_2 - CH_2 - NH - C} \bigcap_{CH_2 \to 0H} \bigcap_{N \to \infty} \bigcap_{CH_2 \to 0H} \bigcap_{CH_2 \to 0H} \bigcap_{CH_2 \to 0H} \bigcap_{N \to \infty} \bigcap_{CH_2 \to 0H} \bigcap_{CH_2$$

RN 587862-66-6 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipyrindin-5-yl)ethyl]-2-fluoro-6-hydroxy- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 587862-71-3 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl]-4-(hydroxymethyl)- (9C1) (CA INDEX NAME)

RN 587862-72-4 CAPLUS
CN Benzamide, 2-amino-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-3-methoxy- (9CI) (CA INDEX NAME)

RN 587862-73-5 CAPLUS
CN Benzamide, 2-amino-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 587862-74-6 CAPLUS

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Benzamide, 2-amino-3-chloro-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thloxo-5H-pycrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

587862-75-7 CAPLUS
Benzamide, 2-amino-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pycimidin-5-yl)ethyl]-3-hydroxy- (9CI) (CA INDEX NAME)

587862-76-8 CAPLUS
Benzamide, 2-anino-N-[2-(7-cyano-1,4-dihydco-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pycimidin-5-y1)ethyl]-5-methoxy- (9CI) (CA INDEX NAME)

Så7862-77-9 CAPLUS Bénzamide. 2-anino-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl]-5-fluoro- (9CI) (CA INDEX NAME)

ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 587862-81-5 CAPLUS Benzamide, 2-anino-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-5-hydroxy- (9CI) (CA INDEX NAME)

587862-82-6 CAPLUS
Benzamide, 2-amino-6-chloro-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

S87862-83-7 CAPLUS Benzamide, 2-amino-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d|pyrimidin-5-yl]ethyl]-6-fluoro (9CI) (CA INDEX NAME)

587862-84-8 CAPLUS
Benzamide, 2-amino-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pycimidin-5-yl)ethyl]-6-methoxy- (9CI) (CA INDEX NAME)

587862-85-9 CAPLUS Benzamide, 4-benzoyl-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-

Page 70

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT- 2007 ACS on STN

587862-78-0 CAPLUS
Benzamide, 2-amino-5-chloro-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3],2-djpyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

587862-79-1 CAPLUS
Benzamide, 2-amino-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl]-5-nitro- (9CI) (CA INDEX NAME)

587862-80-4 CAPLUS Benzamide, 2-amino-N-[2-(7-cyano-1,4-dihydco-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-6-methyl- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

587862-86-0 CAPLUS
Benzamide, 3-benzoyl-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

597862-87-1 CAPLUS
Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-4-(2-cyclohexen-1-yloxy)- (9CI) (CA INDEX NAME)

587862-88-2 CAPLUS
Pentanamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2-oxo- (9CI) (CA INDEX NAME)

587862-89-3 CAPLUS
Acetic acid, [[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d)pyrimidin-5-yl)ethyllaminoloxo-, methyl ester [9CI] (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587862-90-6 CAPLUS 58/86Z-90-5 CAPLUS Cyclopropanecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{picture}(20,0) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){100$$

587862-91-7 CAPLUS
2-Furancarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5Hpytrolo[3,2-d]pytrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

587862-92-8 CAPLUS 2-Furancathoxamide, N-[2-[7-cyano-1.4-dihydro-6-(3-methyl-2-thienyl)-4 thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- [9CI] (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587862-96-2 CAPLUS Benzenacetamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pycimidin-5-yl)ethyl]-a-oxo- (9CI) (CA INDEX NAME)

587862-97-3 CAPLUS
Benzenepropanamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pycimidin-5-yl)ethyl]-a-oxo- (9CI) (CA INDEX NAME)

587862-98-4 CAPLUS 3-Thiophenearboxamide, N-{2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimiddin-5-yl)ethyl}- (9C1) (CA INDEX NAME)

587862-99-5 CAPLUS
Pyrazinecarboxamide, 3-amino-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

587863-00-1 CAPLUS 2-Thiophenecarboxamide, N-{2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-Page 71

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
S97862-93-9 CAPLUS
CN 2-Furancarboxamide, N-[2-[6-(3-chloro-2-thienyl)-7-cyano-1,4-dibydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

587862-94-0 CAPLUS
2-Furancarboxamide, N-[2-[7-cyano-1,4-dihydro-6-(1-methyl-1H-pyrrol-2-yl)-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl)- (9CI) (CA INDEX NAME)

587862-95-1 CAPLUS
1H-Indole-3-acetamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxos5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-e-oxo- (9CI) (CA INDEX NAME)

ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS ON STN (Continued)
pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

587863-01-2 CAPLUS
2-Thiophenecarboxamide, N-[2-[7-cyano-1,4-dihydro-6-(3-methyl-2-furanyl)-4-thioxo-5H-pyrrol03,2-d]pyrimidin-5-yl]ethyl]- (SCI) (CA INDEX NAME)

587863-02-3 CAPLUS
2-Thiophenecarboxamide, N-[2-[7-cyano-1,4-dihydro-6-(3-methyl-2-thienyl)-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9C1) (CA INDEX NAME)

587863-03-4 CAPLUS
2-Thiophenecarboxamide, N-[2-[6-(3-chloro-2-thieny1)-7-cyano-1,4-dihydro-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

S87863-04-5 CAPLUS

2-Thiophenecarboxamide, N-[2-[7-cyano-1,4-dihydro-6-(1-methyl-1H-pyrrol-2-yl)-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 587863-05-6 CAPLUS
CN 3-Pyridazinecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]-1,4,5,6-tetrahydro-6-oxo- {9CI} (CA INDEX NAME)

RN 587863-06-7 CAPLUS
CN 2H-Pyran-5-cacboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcholo[3,2-d]pyrimidin-5-yl)ethyl]-2-oxo- (9Cl) (CA INDEX NAME)

RN 587863-07-8 CAPLUS
CN 4H-Pyran-2-carboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]-4-oxo-(9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587863-11-4 CAPLUS
CN 3-Pyridinecarboxamide, 2-chloro-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thiowo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 587863-12-5 CAPLUS
CN 3-Furancarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2,5-dimethyl- (9CI) (CA INDEX NAME)

RN 587863-13-6 CAPLUS
CN 3-Pyridinecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2-(methylthio)- (9C1) (CA INDEX NAME)

RN 587863-14-7 CAPLUS
CN 3-Thiophenecarboxamide, N-{2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-5-nitro-{9CI} (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587863-08-9 CAPLUS
CN 1H-Pyrazole-5-carboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-1-ethyl-3-methyl- (9CI) (CA INDEX NAME)

RN 587863-09-0 CAPLUS
CN 1H-Pycazole-5-carboxamide, N-[2-[6-(3-chloro-2-thienyl)-7-cyano-1,4-dihydco-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl]ethyl]-1-ethyl-3-methyl-(9C1) (CA INDEX NAME)

RN 587863-10-3 CAPLUS
CN 2-Thiophenecarboxamide, N-{2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl}-5-nitro- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587863-15-8 CAPLUS
CN 1,2,3-Thiadiazole-4-carboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 587863-16-9 CAPLUS
CN HH-Pyrcole-3-carboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcho[6],2-d]pyrimidin-5-yl)ethyl]- (9C1) (CA INDEX NAME)

RN 587863-17-0 CAPLUS CN 1-Naphthalenecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5Hpyrcolo[3,2-d]pyrimidin-5-yl)ethyl]- [9CI) (CA INDEX NAME)

$$\bigcap_{N \longrightarrow CH_2-CH_2-NH-C=0}^{CN}$$

RN 587863-18-1 CAPLUS
CN 1H-Pyrrole-2-carboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-1-methyl- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

587863-19-2 CAPLUS

ps/soj-19-2 CATAUS 2-Thiophenecarboxamide, 5-acetyl-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

587863-20-5 CAPLUS 2-Thiophenecacboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrinidin-5-yl]ethyl]-3-ethoxy- (9C1) (CA INDEX NAME)

597863-21-6 CAPLUS
3-Isonazolecarboxamide, N-(2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pycluddin-5-yl)ethyl]-4-methyl- (9CI) (CA INDEX NAME)

587863-22-7 CAPLUS

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

S87863-26-1 CAPLUS
2-Thiopheneca-choxamide, S-chloro-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

587863-27-2 CAPLUS
1H-Pyrazole-3-carboxamide, N-[2-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl}-5-nitro- (9CI) (CA INDEX NAME)

587863-28-3 CAPLUS
1H-Pyrrole-2-carboxamide, N-{2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl}- (9CI) (CA INDEX NAME)

587863-29-4 CAPLUS |H-Pyrcole-2-catooxamide, N-[2-[7-cyano-1,4-dihydro-6-(3-methyl-2-thienyl)-|4-thioxo-5H-pyrcolof(3,2-d)pyrimidin-5-yl}ethyl|- (9CI) (CA INDEX NAME)

L16 ANSMER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN 4-Isoxazolecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]-3-methyl- (9CI) (CA INDEX NAME)

587863-23-8 CAPLUS
4-Isoxazolecarboxamide, N-{2-{6-(3-chloro-2-thienyl)-7-cyano-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl}-3-methyl- (9CI) (CA INDEX NAME)

587863-24-9 CAPLUS
2-Thiophenecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl]-3-methyl- (9C1) (CA INDEX NAME)

587863-25-0 CAPLUS
2-Thiophenecarboxamide, 3-chloro-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl}- (9CI) (CA INDEX NAME)

1.16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS ON STN (Continued)

587863-30-7 CAPLUS
1H-Pyrrole-2-carboxamide, N-[2-[6-(3-chloro-2-thienyl)-7-cyano-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

587863-31-8 CAPLUS
1H-Pyrrole-2-carboxamide, N-[2-[7-cyano-1,4-dihydro-6-(1-methyl-1H-pyrrol-2-yl)-4-thoxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX

587863-32-9 CAPLUS JOINDOJ-J2-9 CAPLUS
4-[soxazolecarboxamide, 3-(2-chloro-6-fluoropheny1)-N-[2-(7-cyano-1,4-dihydro-6-pheny1-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-y1)ethy1]-5-methy1-(9CI) (CA INDEX NAME) L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587863-33-0 CAPLUS
CN Benzo[b] thiophene-2-carboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]- (9C1) (CA INDEX NAME)

RN 597863-34-1 CAPLUS CN 2-Quinowalinecarboxamide, N-{2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl}- (9Cl) (CA INDEX NAME)

RN 587863-35-2 CAPLUS

CN 2-Thiophenecarboxamide, 3-chloro-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyccolo[3,2-d]pycimidin-5-yl]ethyl]-4-[(1-methylethyl)sulfonyl]-(9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

RN 587863-39-6 CAPLUS
CN IH-Indole-4-carboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrole(3,2-d]pyciaidin-5-yl)ethyl]- (9C1) (CA INDEX NAME)

NN 587863-40-9 CAPLUS

H-Benzimidazole-5-carboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5fi-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 587863-41-0 CAPLUS
CN lH-Indole-2-carboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 587863-42-1 CAPLUS
CN IH-Indole-3-carbowamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9Cl) (CA INDEX NAME)

Page 74

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

$$\begin{array}{c} \begin{array}{c} CN \\ N \\ N \end{array} \\ \begin{array}{c} CH_2-CH_2-NH-C \\ \end{array} \\ \begin{array}{c} CI \\ O \end{array} \\ \begin{array}{c} S \\ O \end{array}$$

RN 587863-36-3 CAPLUS
CN IH-Pyrazole-4-carboxamide, 1-(4-chlorophenyl)-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]-5-(trifluoromethyl)(9CI) (CA INDEX NAME)

$$\bigcap_{N \longrightarrow N- CH_2- CH_2- NH-C}^{CN} \bigcap_{N \longrightarrow N- CH_2- CH_2- NH-C}^{CF3} \bigcap_{N \longrightarrow N- CH_2- CH_2- NH-C}^{C1}$$

RN 587863-37-4 CAPLUS
3-Furancacboxamide, 5-(4-chlorophenyl)-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl]-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CN} \\ \text{N} \\ \text{N} \\ \text{S} \end{array} \begin{array}{c} \text{Ch}_2 - \text{Ch}_2 - \text{NH-} \\ \text{Me} \end{array} \begin{array}{c} \text{C1} \\ \text{Me} \end{array}$$

S87863-38-5 CAPLUS

2-Naphthalenecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Cont.

RN 587863-43-2 .CAPLUS
CN 2H-1-Benzopyran-3-carboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2-oxo-(9CI) (CA INDEX NAME)

RN 587863-44-3 CAPLÚS CN 2H-Indazole-3-carboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pycinidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 587863-45-4 CAPLUS
CN 1H-Pyrazole-3-carboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo(3,2-d)pyrimdin-5-yl)ethyl]-4-nitro- (9CI) (CA INDEX NAME)

N 587863-46-5 CAPLUS
2-Thiophenecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo(3,2-d)pycrimidin-5-yl)ethyl]-5-(methylthio)- (9CI) (CA INDEX NAME)

1.16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

$$\begin{picture}(20,0) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){100$$

587863-47-6 CAPLUS
4-Isoxazolecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-chioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl]ethyl]-5-methyl- [9C1) (CA INDEX NAME)

587863-48-7 CAPLUS
1H-Pyrrole-2-carboxamide, 4-acetyl-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrolo[3,2-d]pyrimidin-5-yl)ethyl]-3,5-dimethyl- (9CI) (CA INDEX NAME)

587863-49-8 CAPLUS 1H-Pyrcole-2-carboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcole3,2-d]pyrimidin-5-yl)ethyl)-4-nitro-[9C] (CA INDEX NAME)

ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

587863-54-5 CAPLUS
4-Pyridinecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

587863-55-6 CAPLUS 4-Pyridinecarboxanide, N-{2-[7-cyano-1,4-dihydro-6-(3-methyl-2-furanyl)-4-thioxo-5tt-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

587863-56-7 CAPLUS
4-Pyridinecarboxamide, N-[2-[6-(3-chloro-2-thienyl)-7-cyano-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9Cl) (CA INDEX NAME)

587863-57-8 CAPLUS Cyclohexanecarboxamide, N-[2-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
S87863-50-1 CAPLUS
CN 3-Pyridinecarboxamide, 2-amino-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxoSH-pyrcolo[3,2-d]pyrimidin-5-y1)ethyl]- (9C1) (CA INDEX NAME)

587863-51-2 CAPLUS 1H-Imidazole-4-carboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

587863-52-3 CAPLUS
2-Pyridinecarboxamide, N-{2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9C[) (CA INDEX NAME)

587863-53-4 CAPLUS
3-Pyridinecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587863-58-9 CAPLUS
4-Isoxazolecatoboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]-3,5-dimethyl- (9CI) (CA INDEX NAME)

887863-59-0P 587863-60-3P 587863-61-4P 587863-62-5P 587863-63-69 587863-64-7P 587863-65-8P 587863-66-9P 587863-67-5P 587863-66-9P 587863-67-5P 587863-66-9P 587863-66-9P 587863-73-6P 587863-69-2P 587863-73-6P 587863-73-4P 587863-72-7P 587863-73-4P 587863-72-7P 587863-73-4P 587863-73-4P 587863-73-4P 587863-73-4P 587863-73-4P 587863-73-4P 587863-73-4P 587863-81-4P 587863-82-9P 587863-80-7P 587863-81-4P 587863-82-9P 587863-80-5P 587863-81-4P 587863-83-5P 587863-81-4P 587863-83-5P 587863-81-4P 587863-91-5P 587863-90-5P 587863-91-5P 587863-90-5P 587863-91-5P 587863-91-5P 587863-91-5P 587863-91-5P 587863-91-5P 587863-91-5P 587864-02-6P 587864-03-7P 587864-03-5P 587864-59-3P 58786 ΙT

ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 587864-63-9P 587864-64-0P 587864-65-1P 587864-65-95 887864-67-0P 587864-65-1P 587864-69-95 887864-67-0P 587864-65-1P 587864-67-0P 587864-67-19-95 587864-70-1P 587864-70-1P 587864-71-19P 587864-71-3P 587864-76-48-75-75 587864-77-1P 587864-76-48-75-75 587864-71-1P 587864-76-48-3P 587864-77-75 587864-77-5P 587864-77-68-75 587864-77-1P 587864-80-1P 587864-80-1P 587864-80-1P 587864-80-1P 587864-80-1P 587864-80-1P 587864-80-1P 587864-80-1P 587864-80-1P 587864-90-1P 587864-90-1P 587864-90-1P 587864-90-1P 587864-90-1P 587864-90-1P 587864-90-1P 587864-90-1P 587864-90-1P 587865-01-1P 587865-01-1P 587865-02-9P 587865-00-1P 587865-01-1P 587865-02-9P 587865-01-1P 5 (Uses)
(drug candidate; prepn. of pyrrolopyrimidine derivs. as GSK-3 inhibitors)
507863-59-0 CAPLUS
Benzeneacetamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

ANSVER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
Benzoic acid, 4-[[[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pytrolo[3,2-d]pytimidin-5-yl)propyl]amino[methyl]-, methyl ester (9CI) (CA INDEX NAME)

587863-64-7 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-[[(4-nitrophenyl)methyl]amino]propyl]-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587863-65-8 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-[[(4-methoxyphenyl)methyl]amino]propyl]-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587863-66-9 CAPLUS

1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-[[[4-(methylsulfonyl)phenyl]methyl]aminolpropyl]-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

Page 76

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587863-60-3 CAPLUS Benzamide, N-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipyrimid-5-yl)propyl]- (9CI) (CA INDEX NAME)

587863-61-4 CAPLUS

Benzoic acid, 4-{[[3-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)propyl}amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

587863-62-5 CAPLUS Benzoic acid. 4-[[[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyriadin-5-yl]propyl]amino]carbonyl]- (9CI) (CA INDEX NAME).

587863-63-6 CAPLUS

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587863-67-0 CAPLUS
Urea, N-{2-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo{3,2-d}pyrimidin-5-yl}ethyl}-N'-phenyl- (9CI) (CA INDEX NAME)

587863-68-1 CAPLUS Urea, N-{3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo{3,2-d}pyrimidin-5-y1)propyl]-N'-phenyl- (SCI) (CA INDEX NAME)

587863-69-2 CAPLUS
Benzoic acid, 3-[[[[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d)pyrimidin-5-yl)propyl}amino|carbonyl]amino|- (9CI) (CA INDEX NAME)

587863-70-5 CAPLUS Urea, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-N'-[3-(diethylamino)propyl]- (9CI) (CA INAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 587863-71-6 CAPLUS
CN Ucea, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pytrolo[3,2-d]pyrimidin-5-yl)ethyl]-N'-(2-cyclohexylethyl)- (9C1) (CA INDEX NAME)

587863-72-7 CAPLUS Urea, N-[2-(7-cyano-1, 4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)echyl}-N'-[2-(4-morpholinyl)ethyl]- (9CI) (CA INDEX NAME)

587863-73-8 CAPLUS Urea, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-y1)ethyl]-N'-[3-(4-morpholinyl)propyl]- (9CI) (CA INDEX NAME)

587863-74-9 CAPLUS
Urea, N-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)propyl}-N'-[3-(diethylamino)propyl]- (9CI) (CA INDEX NAME)

ANSVER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) β-Alanine, N-[[[2-(7-cyano-1.4-dihydro-6-phenyl-4-thioxo-5H-pytrolo[3,2-d]pytrimidin-5-yl)ethyl]amino|carbonyl]- [9CI) (CA INDEX NAME)

597863-79-4 CAPLUS Glycine, N-[[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dlyycimidin-5-y1)propyl]aminolcarbonyl]- (9CI) (CA INDEX NAME)

S87863-80-7 CAPLUS
B-Alanine, N-[[[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)propyl]amino]carbonyl]- (9CI) (CA INDEX NAME)

587863-81-8 CAPLUS
Butanoic acid, 4-{[[[3-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pycimidin-5-yl)propyl]amino]carbonyl]amino]- (9CI)
INDEX NAME!

587863-82-9 CAPLUS Benzoic acid, 4-{{{{[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

587863-75-0 CAPLUS Urea, N-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyriaidin-5-yl]propyl]-N'-(2-cyclohexylethyl)- (9CI) (CA INDEX NAME)

587863-76-1 CAPLUS Urea, N-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)propyl]-N'-[2-(4-morpholinyl)ethyl]- (9CI) (CA INDEX NAME)

587863-77-2 CAPLUS
Thiourea, N-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d)pyrimidin-5-yl)propyl]-N'-[3-(4-morpholinyl)propyl]- (9CI) (CA INDEX NAMF)

587863-78-3 CAPLUS

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) pyrrolo[3,2-d]pyrimidin-5-y1)ethyl]amino]thioxomethyl]amino]- (9CI) (CA INDEX NAME)

587863-83-0 CAPLUS
Urea, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-N'-(3-fluorophenyl)- (9CI) (CA INDEX NAME)

587863-84-1 CAPLUS Urea, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-N'-(4-fluorophenyl)- (9Cl) (CA INDEX NAME)

587863-85-2 CAPLUS Urea, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-N'-(3-methylphenyl)- (9CI) (CA INDEX NAME)

587863-86-3 CAPLUS Urea, N-[2-(T-cyano-1,4-dihydco-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl]-M'-(2-methylphenyl)- (9Cl) (CA INDEX NAME)

Page .77

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continu

RN 587863-87-4 CAPLUS
CN Urea, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-y1)ethyl]-N'-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 587863-88-5 CAPLUS
CN Urea, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyccolo[3,2-d]pyc:midin-5-yl.ethyl]-N'-1-naphthalenyl- (9CI) (CA INDEX NAME)

RN 587863-89-6 CAPLUS
CN Urea, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-N'-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDE) NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 587863-94-3 CAPLUS
CN Cyclopentanecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-SH-pyccolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 587863-95-4 CAPLUS
CN Benzamide, N-[2-[7-cyano-6-(2-furanyl)-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl}- (9CI) (CA INDEX NAME)

RN 587863-96-5 CAPLUS
CN Benzeneacetamide, N-[2-[7-cyano-6-(2-furanyl)-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 587863-97-6 CAPLUS
CN Benzamide, N-[2-{7-cyano-6-(2-furanyl)-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-methoxy- (9CI) (CA INDEX NAME)

Page 78

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 587863-90-9 CAPLUS
CN Urea, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl)-N'-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 587863-91-0 CAPLUS
CN Urea, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-N-(2-fluorophenyl)- (9C) (CA INDEX NAME)

RN 587863-92-1 CAPLUS
CN Urea, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-N'-2-naphthalenyl- (9CI) (CA INDEX NAME)

RN 597863-93-2 CAPLUS
CN Acetamide, N-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-y1)propyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587863-98-7 CAPLUS
CN 2-Thiophenecarboxamide, N-{2-[7-cyano-6-(2-furanyl)-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- {9CI} (CA INDEX NAME)

RN 587863-99-8 CAPLUS
CN 4-Pyridinecarboxamide, N-[2-[7-cyano-6-(2-furanyl)-1,4-dihydro-4-thioxo-5H-pyrclo](3,2-d]pyrimidin-5-yl]ethyl]- (9C1) [CA INDEX NAME)

RN 587864-00-4 CAPLUS
CN Urea, N-[2-[7-cyano-6-(2-furanyl)-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-N\*-phenyl- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587864-01-5 CAPLUS

Benzoic acid, 4-[[[[2-[7-cyano-6-(2-furanyl)-1,4-dihydro-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]amino]carbonyl]amino]-, methyl ester (SCI) (CA INDEX NAME)

RN 587864-02-6 CAPLUS
CN Benzamide, N-{3-{7-cyano-6-(2-furany1)-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-y1]propy1]- (9CI) (CA INDEX NAME)

RN 587864-03-7 CAPLUS
CN Benzeneacetamide, N=[3-[7-cyano-6-(2-furanyl)-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]propyl]- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587864-07-1 CAPLUS
CN Cyclobutanecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 597864-08-2 CAPLUS
CN 2-Thiopheneacetamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 587864-09-3 CAPLUS
CN 4-Piperidinecarboxamide, 1-acetyl-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 587864-10-6 CAPLUS
CN Benzamide, N-[2-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl]-4-fluoro- (9CI) (CA INDEX NAME)

Page 79

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN \$87864-04-8 CAPLUS
CN Benzamide, N-[3-[7-cyano-6-(2-furany])-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]propyl]-4-methoxy- (9CI) (CA INDEX NAME)

RN 587864-05-9 CAPLUS
CN 2-Thiophenearboxamids, N-[3-[7-cyano-6-(2-furanyl)-1,4-dihydro-4-thioxoSH-pyrcolo[3,2-d]pyrimidin-5-yl]propyl]- [9C1) (CA INDEX NAME)

RN 587864-06-0 CAPLUS
CN 4-Pyridinecarboxamide, N-[3-[7-cyano-6-(2-furanyl)-1,4-dihydro-4-thioxo-5H-pyrcho[3,2-d]pyrimidin-5-yl]propyl]- [9Cl) (CA [NDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587864-11-7 CAPLUS
CN Propanamide, N-[2-(7-cyano-1.4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipycinidin-5-yl)thyl]-2,2-dimethyl- (9CI) (CA INDEX NAME)

$$\bigcap_{N \in \mathcal{N}} \bigcap_{N \in \mathcal{N}} \bigcap_$$

RN 587864-12-8 CAPLUS
CN Benzamide, N-[2-[7-cyano-1,4-dihydro-6-(3-methyl-2-furanyl)-4-thioxo-5H-pyrrolo[3,2-d)pyrimidin-5-yl]ethyl]-2-nitro- (9CI) (CA INDEX NAME)

RN 587864-13-9 CAPLUS
CN Benzamide, 4-cyano-N-[2-[7-cyano-1,4-dihydro-6-(3-methyl-2-furanyl)-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 587864-14-0 CAPLUS

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Benzeneacetamide, N-[2-[7-cyano-1,4-dihydro-6-(3-methyl-2-furanyl)-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

587864-15-1 CAPLUS
Benzeneacetamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-methoxy- (9CI) (CA INDEX NAME)

587864-16-2 CAPLUS
Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-3-methyl- (9CI) (CA INDEX NAME)

587864-17-3 CAPLUS
Benzamide, N-[2-[7-cyano-],4-dihydro-6-(3-hydroxyphenyl)-4-thioxo-5H-pycrolo[3,2-d]pyriaidin-5-yi|ethyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

587864-21-9 CAPLUS
2-Pyrrolidinecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl}-5-oxo- (9CI) (CA INDEX NAME)

587864-22-0 CAPLUS
3-Furancarboxamide, N-[2-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-y1]ethyl]tetrahydro-2,2-dimethyl-5-oxo- (9CI) (CA INDEX NAME)

587864-23-1 CAPLUS Benzamide, N-[2-[7-cyano-6-(2-furanyl)-1,4-dihydro-4-thioxo-5H\*pyrrolo[3,2-d)pyrimdin-5-yl]ethyl]-4-fluoro- (9CI) (CA IMDEX NAME)

587864-24-2 CAPLUS
Benzenecarbothioamide, N-[2-[7-cyano-1,4-dihydro-6-(3-hydroxyphenyl)-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587864-18-4 CAPLUS
2-Furancarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]tetrahydro- {9CI} (CA INDEX NAME)

587864-19-5 CAPLUS 2-Furancarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]tetrahydro-5-oxo- (9CI) (CA INDEX NAME)

587864-20-8 CAPLUS 3-Purancarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl|tetrahydro- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

S87864-25-3 CAPLUS Cyclohexanecarboxamide, N-{2-(7-cyano-1,4-dihydco-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-4-methoxy- (9CI) (CA INDEX NAME)

587864-26-4 CAPLUS Butanoic acid, 4-[[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]amino]-4-oxo-, methyl ester (9CI) (CA INDEX NAME)

587864-27-5 CAPLUS
Butanoic acid, 4-[[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]amino]-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)

587864-28-6 CAPLUS Acetamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-dipycindin-5-y)ethyl]-2-(dimethylamino)- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

587864-29-7 CAPLUS
Heptanoic acid, 7-[[2-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]amino]-7-oxo-, ethyl ester (9CI) (CA 1NDEX NAME)

587864-30-0 CAPLUS
1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[2-(2-methyl-4-oxo-3(4H)-quinazolinyl)ethyl]-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587864-31-1 CAPLUS

Benzeneacetamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-a-methoxy- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587864-38-8 CAPLUS
Benzamide, N-(3-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)propyl}-2-(dimethylamino)- (9CI) (CA INDEX NAME)

587864-39-9 CAPLUS
Cyclopropanecarboxamide, N-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)propyl]-1-hydroxy- (9CI) (CA INDEX NAME)

587864-40-2 CAPLUS
Cyclopropanecarboxamide, 1-cyano-N-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)propyl]- (9C1) (CA INDEX NAME)

587864-41-3 CAPLUS IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(2-methyl-4-oko-3(4H)-quinazolinyl)propyl]-6-phenyl-4-thioxo- (9Cl) (CA INDEX NAME)

587864-42-4 CAPLUS

Page 81

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 597864-32-2 CAPLUS
CN 2-Thiszolidinsearboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pycimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

587864-33-3 CAPLUS Cyclopropanecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]-1-hydroxy- (9CI) (CA INDEX NAME)

587864-35-5 CAPLUS 58/804-35-3 CAPLUS Cyclopropanecarboxamide, 1-cyano-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo(3,2-d)pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

587864-37-7 CAPLUS 2-Thiazolidinecarboxamide, N-(3-(7-cyano-1,4-dihydco-6-phenyl-4-thioxo-5H-pycrole(3,2-d)pycimidin-5-yl)propyl)- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) CN Acetamide, N-[2-[7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]-2,2,2-trifluoro-N-methyl- (9C1) (CA INDEX NAME)

587864-43-5 CAPLUS
Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrindidin-5-y]ethyl]-N-methyl- (9CI) (CA INDEX NAME)

587864-44-6 CAPLUS Benzamide, 2-amino-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d|pyrimidin-5-yl)ethyl]-N-methyl- (9CI) (CA INDEX NAME)

587864-45-7 CAPLUS
Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-N-methyl-2-(methylamino)- (9CI) (CA INDEX NAME)

587864-46-B CAPLUS
Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d)pyriadidin-5-yl)ethyl]-2-methoxy-N-methyl- (9CI) .(CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continue

RN 587864-47-9 CAPLUS
CN Propanamide, 2-(4-chlorophenoxy)-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2-methyl- (9CI) (CA INDEX NAME)

RN 587864-48-0 CAPLUS
CN Benzeneactamide, N-(2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo(3,2-d)pytmidin-5-yl)ethyl]-a-phenyl- (9CI) (CA INDEX NAME)

RN 587864-49-1 CAPLUS
CN 2-Butenamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pytrolo[3,2-d]pytimidin-5-yl] ethyl]- [9C1] (CA INDEX NAME)

RN 587864-50-4 CAPLUS

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continu

RN 587864-54-8 CAPLUS
CN Acetamide, N-[2-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl}-2-phenoxy- (9CI) (CA INDEX NAME)

RN 587864-55-9 CAPLUS
CN Acetamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]-2-(phenylmethoxy)- (9CI) (CA INDEX NAME)

RN \$97864-56-0 CAPLUS
Propanoic acid, 3-{(2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrclo[3,2-d]pyrimidin-5-yl)ethyl]amino]-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

RN 587864-57-1 CAPLUS
CN Benzeneacetamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl]-4-fluoro- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Propanamide, 2-(acetyloxy)-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2-methyl- (9CI) (CA INDEX NAME)

RN 587864-51-5 CAPLUS
CN 2-Propenamide, N-{2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d])pyrimidin-5-yl)ethyl]-3-phenyl- (9CI) (CA INDEX NAME)

RN 587864-52-6 CAPLUS
CN Propanamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-2-phenoxy- (9CI) (CA INDEX NAME)

RN 587864-53-7 CAPLUS
CN Acetamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-2-methoxy- (9Cl) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587864-58-2 CAPLUS
CN Cyclopentaneacetamide. N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 587864-59-3 CAPLUS

4-Piperidinecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl]-1-(methylsulfonyl)- (9CI) (CA INDEX NAME)

$$\bigcap_{\substack{\text{I} \\ \text{I} \\ \text{I} \\ \text{I}}} \bigcap_{\text{N} - \text{CH}_2 - \text{CH}_2 - \text{NH} - \text{C}} \bigcap_{\text{I} = \text{N}} \bigcap_{\text{I} = \text{N}}$$

RN 587864-60-6 CAPLUS
CN Benzeneacetamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]-3-methoxy- (9CI) (CA INDEX NAME)

RN 587864-61-7 CAPLUS

Benzeneacetamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-4-(phenylmethoxy)- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587864-62-8 CAPLUS Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipyrimdin-5-y)lethyl]-3,5-difluoro- (9CI) (CA INDEX NAME)

$$\bigcap_{N \to -CH_2-CH_2-NH-C}^{H} \bigcap_{N \to -CH_2-CH_2-NH-C}^{Ph}$$

587864-63-9 CAPLUS Benzeneacetamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrlaidin-5-yl]ethyl]-a-ethyl- (9CI) (CA INDEX NAME)

587864-64-0 CAPLUS Acetamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipyrimin-5-y)tethyl]-2-(phenylthio)- (9CI) (CA INDEX NAME)

587864-65-1 CAPLUS Acetamide, N-[2-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]-2-{2-methoxyethoxy}- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587864-69-5 CAPLUS

CN Carbamic acid, [(1S)-1-[[[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]amino]carbonyl]-3-methylbutyl]-,

phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

587864-70-8 CAPLUS
Carbamic acid, [(15)-2-[[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pytrolo[3,2-d]pyrindidin-5-y1)ethyl]amino]-1-methyl-2-oxoethyl]-,
phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

587864-71-9 CAPLUS
Carbamic acid, [2-{[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcrolo[3,2-d]pyrimidin-5-yl)ethyl]amino]-2-oxoethyl}-, phenylmethyl ester (9CI) (CA INDEX NAME)

587864-72-0 CAPLUS .
Propanamide, 2-(acetylamino)-N-(2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-

Page 83

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587864-66-2 CAPLUS Butananide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

587864-67-3 CAPLUS
Butanamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-3-methyl- (9CI) (CA INDEX NAME)

587864-68-4 CAPLUS
3-Pyrcolidinecarboxamide, 1-{{4-chlorophenyl}methyl}-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-chloxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl}ethyl}-5-oxo-(9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 5H-pyrcolo[3,2-d]pyrimidin-S-yllethyl]- (9CI) (CA INDEX NAME)

587864-73-1 CAPLUS Pentanamide, 2-(acetylamino)-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo Sh-pyrcolo(3,2-d]pytimidin-5-yl)ethyl-4-methyl- (9Cl) (CA INDEX NAME)

587864-74-2 CAPLUS
Carbamic acid, [2-[[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[[3,2-d]pyrimidin-5-yl]ethyl]amino]-2-oxoathyl]methyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

587864-75-3 CAPLUS
Acetamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipyrindidn-5-y1)ethyl]-2-(2-pyrimidinylthio)- (9Cl) (CA INDEX NAME)

 $\begin{array}{lll} 587864-76-4 & CAPLUS \\ 2-Furancarboxamide, & N-[2-\{[2-\{7-cyano-1,4-dihydro-6-pheny]-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-y1]ethyl]amino]-2-oxoethyl]- & (CA INDEX NAME) \\ \end{array}$ 

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587864-77-5 CAPLUS
3-Pyridinecarboxamide, N-[2-[[2-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl}ethyl]amino]-2-oxoethyl]- {9CI} (CA INDEX NAME)

RN 587864-78-6 CAPLUS
CN Blutanediandie, N'-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3.2-d]pyrimidin-5-yl)ethyl]-N.N-dimethyl- (9CI) (CA INDEX NAME)

RN 587864-79-7 CAPLUS CN 4-Pentynamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl-tehyl]- (9CI) (CA INDEX NAME)

RN 587864-80-0 CAPLUS

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN .(Continued)

RN 587864-85-5 CAPLUS. Propanamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-dipydroidin-5-yl)thyl]-2-hydroxy-2-methyl- (9C1) (CA INDEX NAME)

RN 587864-86-6 CAPLUS
CN Cyclopropanecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)ethyl]-1-methyl- (9C1) (CA INDEX NAME)

RN 587864-87-7 CAPLUS
CN Carbamic acid, [3-{[2-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]amino]-3-oxopropyl]-, phenylmethyl ester (9Cl) (CA INDEX NAME)

RN 587864-88-8 CAPLUS
CN Cyclopropanecarboxamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]-2-methyl- [9C1] (CA INDEX NAME)

Page 84

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Benzamide, N=[2-[[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d)pyrimidin-5-yl)ethyl]amino]-2-oxoethyl]- [9CI] (CA INDEX NAME)

$$\bigcap_{N=1}^{H}\bigcap_{N=1}^{CN}\bigcap_{N=1}^{Ph}\bigcap_{CH_2-CH_2-NH-C-Ph}\bigcap_{N=1}^{N}\bigcap_{N=1}^$$

RN 587864-81-1 CAPLUS.
CN 1H-Imidazole-4-propanamide, α-(acetylamino)-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 587864-83-3 CAPLUS
CN Benzamide, N-[2-[6-(2-chloropheny1)-7-cyano-1,4-dihydro-4-thiοκο-5H-pyrrol(3,2-d)pyrimidin-5-y1]ethy1]- (9C1) (CA INDEX NAME)

RN 587864-84-4 CAPLUS
CN Benzeneacetamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo(3,2-d]pyrimidin-5-yl)ethyl]-2-nitro- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587864-89-9 CAPLUS

CN Butanoic acid, 4-[[2-(7-cyano-1,4-dihydro-6-phenyl-4-chioxo-5H-pyrrolo[3,2-d]pyrimidin-5-y1)ethyl]aminoj-4-oxo- [9CI] (CA INDEX NAME)

RN 587864-90-2 CAPLUS

Sutanamide, 2-(acetylamino)-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)ethyl]-4-(methylthio)- (9CI) (CA INDEX NAME)

RN 587864-91-3 CAPLUS
CM Benzenesulfonamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrinidin-5-yl)ethyl]- [9CI) (CA INDEX NAME)

RN 587864-92-4 CAPLUS
CN Benzenecarbothioamide, N-[2-{7-cyano-6-(2-fluorophenyl)-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- [9CI] (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

Ph-C-NH-CH<sub>2</sub>-CH<sub>2</sub>

RN 587864-93-5 CAPLUS
CN Benzamide, N-[2-[7-cyano-6-(2,6-difluorophenyl)-1,4-dihydro-4-thioxo-5H-pyccolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

Ph-C-NH-CH2-CH2

RN 587864-94-6 CAPLUS
CN Benzamide, N-[2-[7-cyano-6-(2.6-difluorophenyl)-1.4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-fluoro- (9CI) (CA INDEX NAME)

NC F
N F
CH2-CH2-NH-C

RN 587864-95-7 CAPLUS

Benzoic acid, 4-[[[2-[7-cyano-6-[2,6-difluorophenyl]-1,4-dihydro-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

(Continued)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

RN 587864-99-1 CAPLUS
CN Benzamide, 2-amino-N-[2-[7-cyano-6-(2,6-difluorophenyl)-1,4-dihydro-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]-3-methyl- (9CI) (CA INDEX NAME)

RN 587865-00-7 CAPLUS
CN 2-Furancarboxamide, N-[2-[7-cyano-6-(2,6-difluorophenyl)-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 587865-01-8 CAPLUS
CN 2-Thiophenecarboxamide, N-{2-[7-cyano-6-(2,6-difluorophenyl)-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587864-96-8 CAPLUS
CN Benzamide, N-[2-[7-cyano-6-(2,6-difluorophenyl)-1,4-dihydco-4-thioxo-5Hpycrolo[3,2-d]pycimidin-5-yl]ethyl]-4-methoxy- (9CI) (CA INDEX NAME)

RN 587864-97-9 CAPLUS
CN Benzamide, 2-amino-N-[2-[7-cyano-6-(2,6-difluorophenyl]-1,4-dihydro-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 587864-98-0 CAPLUS
CN Benzamide, 2-amino-N-{2-{7-cyano-6-(2,6-difluorophenyl)-1,4-dihydro-4-thioxo-5H-pyrrolo(3,2-d)pyrimidin-5-yl)ethyl)-4-fluoro-(9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587865-02-9 CAPLUS
CN IH-Pyrrole-2-carboxamide, N-[2-[7-cyano-6-(2,6-difluorophenyl)-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

NN 587865-03-0 CAPLUS
CN Benzamide, N-(2-(7-cyano-1,4-dihydro-6-(3-methyl-2-benzofuranyl)-4-thioxoSH-pycrolo(3,2-d)pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 587865-04-1 CAPLUS

Benzenecarbothioamide, N-[2-[7-cyano-1,4-dihydro-6-[3-methyl-2-benzofuranyl]-4-thioxo-5H-pytrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 587865-05-2 CAPLUS
CN Benzamide, N-[2-[7-cyano-6-(3,5-dihydroxyphenyl)-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 587865-06-3 CAPLUS
CN Benzamide, N-[2-[6-(4-acetylphenyl)-7-cyano-1,4-dihydro-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]- (9C1) (CA INDEX NAME)

RN 597865-07-4 CAPLUS
CN Benzamide, N-[2-[7-cyano-6-[3-(dimethylamino) phenyl]-1,4-dihydro-4-thioxoSH-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587865-11-0 CAPLUS
CN 3-Pyridinecarboxamide, 2-amino-N-[2-[6-(3-chloro-2-thienyl)-7-cyano-1,4-dihydro-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 587865-12-1 CAPLUS
CN Benzamide, N-[2-[6-(3-chloro-2-thienyl)-7-cyano-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]-2,4-dihydroxy- (9CI) (CA INDEX NAME)

RN 587865-13-2 CAPLUS
CN 2-Thiophenecarboxamide, 5-acetyl-N-[2-[6-(3-chloro-2-thienyl)-7-cyano-1,4-dhydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl}- (9CI) (CA\_INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS, COPYRIGHT 2007 ACS on STN (Continued)

RN 587865-08-5 CAPLUS
CN Banzamide, N-[2-[7-cyano-1,4-dihydro-4-thioxo-6-(3,4,5-trimethoxyphenyl)SH-pyrcolo[3,2-d-d)pyrimidin-5-yl]ethyl]- (9C1) (CA INDEX NAME)

$$\bigcap_{Ph-C-NH-CH_2-CH_2}^{0} \bigcap_{OMe}^{OMe}$$

RN 587865-09-6 CAPLUS
CN Benzamide, N-[2-[7-cyano-6-(3-fluoro-2-methylphenyl)-1,4-dihydro-4-thioxoSH-pyrrol6[3,2-d]pyrimidin-5-yl]ethyl]- (9Ct) (CA INDEX NAME)

RN 587865-10-9 CAPLUS
CN Benzamide, N-[2-[7-cyano-1,4-dihydro-6-(4-methoxy-2-methylphenyl)-4-thioxo5H-pyrrolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587865-14-3 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-4-[2-(4-morpholinyl)ethoxy]- (9C1) (CA INDEX NAME)

RN 587865-15-4 CAPLUS
CN Benzoic acid, 4-[[[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]amino]methyl]-, methyl ester (9CI) (CA INDEX NAME)

RN \$87865-16-5 CAPLUS
CN HH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[2-[[(4-nitrophenyl)aethyl]amino]ethyl]-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587865-17-6 CAPLUS
CN HI-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[2-[[(4-methoxyphenyl)methyl]amino]ethyl]-6-phenyl-4-thioxo- (9CI) (CA INDEX

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN NAME)

587865-18-7 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[2-[[[4-(methylsulfonyl)phenyl]mmino]ethyl]-6-phenyl-4-thioxo- (9CI) (CA

587865-19-8 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-[2-[[{4-cyanopheny]|methyl]amino]ethyl]-4,5-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587865-20-1 CAPLUS 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[2-[[(2-nitrophenyl)methyl]amino]ethyl]-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
Benzoic acid, 4-[[[2-(7-cyano-1,4-dihydro-6-phenyl-4-thloxo-5Hpycrolo[3,2-d]pyrimidin-5-yl)ethyl]amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

587865-25-6 CAPLUS Ucea, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl}-N'-(4-methylphenyl)- (9CI) (CA INDEX NAME)

587865-26-7 CAPLUS
Urea, N-(4-acetylphenyl)-N'-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

587865-27-8 CAPLUS
Urea, N-(3-acetylphenyl)-N'-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9CI) (CA INDEX NAME)

587865-28-9 CAPLUS
Benzamide, 2-amino-N-{3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)propyl]- (9CI) (CA INDEX,NAME)

Page 87

1.16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587865-21-2 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[2-[[(2-methoxyphenyl)methyl]amino]ethyl]-6-phenyl-4-thioxo-(9CI) (CA INDEX NAME)

587865-22-3 CAPLUS Glycine, N-[[[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl}amino]carbonyl]- (9CI) (CA INDEX NAME)

587865-23-4 CAPLUS
Butanoic acid, 4-[[[[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

587865-24-5 CAPLUS

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587865-29-0 CAPLUS Acetamide, N-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipyrindin-5-yl)propyl]-2,2,2-trifluoro- (9CI) (CA INDEX NAME)

587865-30-3 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(3-methyl-2-thienyl)-5-[2-(4-quinazolinylamino)ethyl]-4-thioxo- (9CI) (CA INDEX NAME)

587865-31-4 CAPLUS Acetamide, N-[3-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-5-yl)propyl]-2,2,2-trifluoro- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

RN 587865-32-5 CAPLUS
CN Benzamide, N-[2-(7-cyano-1,4-dihydro-4-oxo-6-phenyl-5H-pyrrolo[3,2-dipyrimidin-5-yl]ethyl]-4-fluoro- (9Cl) (CA INDEX NAME)

RN 587865-33-6 CAPLUS
CN Benzamide, N-[2-[7-cyano-1,4-dihydro-6-(3-methyl-2-furanyl)-4-oxo-5Hpycrolo[3,2-d]pyrimidin-5-yl]ethyl]-4-fluoro- (9CI) (CA INDEX NAME)

RN 587865-34-7 CAPLUS
CN Benzamide, N-[2-[7-cyano-1,4-dihydro-6-(3-methyl-2-thienyl)-4-oxo-5Hpyrclo[0],2-d)pyrimidin-5-yl]ethyl]-4-fluoro- [9Cl) (CA INDEX NAME)

Li6 ANSVER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 587865-38-1 CAPLUS
CN 5H-Pyrcoloj, 2-d|pyrimidine-5-propanamide, 7-cyano-N, N-diethyl-1, 4-dihydro-6-phenyl-4-thioxo-(9C1) (CA INDEX NAME)

RN 587865-39-2 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-(1-methylethyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587865-40-5 CAPLUS
CN 5H-Pyrcolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-N-(1-ethylpropyl)-1,4-dlhydro-6-phenyl)-4-thioxo- (SCI) (CA INDEX NAME)

RN 587865-41-6 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-N-(2,2-dimethylpropyl)
1,4-dihydro-6-phenyl-4-thioxo-(9CI) (CA INDEX NAME)

RN 587865-42-7 CAPLUS
CN 5H-Pyrrolo[3].2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-6-phenyl-4-thioxon-N(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)

Page 88

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587865-35-8 CAPLUS
CN 2-Furanacetamide, N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)ethyl]-a-oxo- (9CI) (CA INDEX NAME)

NN 587865-36-9 CAPLUS
CN 3-Pyridinecarboxamide, 6-chloro-N-[2-(7-cyano-1,4-dihydro-6-phenyl-4-thlomo-5H-pyrolo[3,2-d]pyrimidin-5-yl)ethyl]- (9C1) (CA INDEX NAME)

RN 587865-37-0 CAPLUS CN SH-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-6-phenyl-4thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587865-43-8 CAPLUS SH-Pycrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-N-(3-ethoxypropyl)-1,4-dindro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587865-44-9 CAPLUS
CN 5H-Pyrrolo(3,2-d)pyrimidine-5-propanamide, 7-cyano-1,4-dibydro-N-(2-(metbylanino)-2-oxoethyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587865-45-0 CAPLUS '

Kethanesulfonic acid, [[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]amino] - (9CI) (CA INDEX NAME)

RN 587865-46-1 CAPLUS CN 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-N-[2-(diethylamino)ethyl]-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME) L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587865-47-2 CAPLUS 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587865-48-3 CAPLUS 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-N-cycloheptyl-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587865-49-4 CAPLUS 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-methyl-N-(l-methyl-4-piperidinyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587865-50-7 CAPLUS 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-N-(cyclopropylmethyl)-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 597865-54-1 CAPLUS St-Pyrcolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-N-(4-fluorophenyl)-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587865-55-2 CAPLUS 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, N-(4-chloropheny1)-7-cyano-1,4-dihydro-6-pheny1-4-thioxo- (9CI) (CA INDEX NAME)

597865-56-3 CAPLUS 5H-Pyrcolol3.2-dlpyrimidine-5-propanamide, 7-cyane-1,4-dihydro-N-(2-methoxyphenyl)-6-phenyl-4-thioxo- (9Cl) (CA INDEX NAME)

587865-57-4 CAPLUS.
5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-(3-methoxyphenyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587865-58-5 CAPLUS 5H-Pyrrolo(3,2-d)pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-[3-(methylthio)phenyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

Page 89

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

587865-51-8 CAPLUS SH-Pyrcolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N,6-diphenyl-4-thioxo- (9CI) (CA INDEX NAME)

587865-52-9 CAPLUS 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-6-(2-furanyl)-1,4-dihydro-N-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587865-53-0 CAPLUS
5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-(2-methylphenyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

587865-59-6 CAPLUS
5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-N-[4(cyanomethyl)phenyl]-1,4-dihydro-6-phenyl-4-thioxo- (9C1) (CA INDEX NAME)

587865-60-9 CAPLUS 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, N-(4-acetylphenyl)-7-cyano-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587865-61-0 CAPLUS
5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, N-(3-acetylphenyl)-7-cyano-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587865-62-1 CAPLUS SH-Pyrcolo(3,2-d)pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-methyl-N,6-diphenyl-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

587865-63-2 CAPLUS 5M-Pyrcolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-(4-methoxyphenyl)-N-methyl-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587865-64-3 CAPLUS SH-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-6-phenyl-N-2-pyridinyl-4-thioxo- (9CI) (CA INDEX NAME)

587865-65-4 CAPLUS
5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-6-phenyl-N-4-pyridinyl-4-thioxo- (9CI) (CA INDEX NAME)

587865-66-5 CAPLUS 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-6-phenyl-N-2-thiazolyl-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 587865-70-1 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-[(4-methoxyphenyl)methyl]-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587865-71-2 CAPLUS SH-Pyrcolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-6-phenyl-N (2-phenylethyl)-4-chiowo- (9CI) (CA INDEX NAME)

587865-72-3 CAPLUS
5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-N-(2-furanylmethy1)-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587865-73-4 CAPUS 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-6-phenyl-N-(2-thienylmethyl)-4-thioxo- [9CI] (CA INDEX NAME)

587865-74-5 CAPLUS
5H-Pyrcolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-6-phenyl-N-(2-pyridinylmethyl)-4-thioxo- (9CI) (CA INDEX NAME)

## Page 90

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

S87865-67-6 CAPLUS SH-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-N-(2,3-dihydro-1H-inden-2-y]-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

S87865-68-7 CAPLUS SH-Pyrcolo[3,2-d|pyrimidine-5-propanamide, 7-cyano-6-(2-furanyl)-1,4-dihydro-N-{phenylmethyl)-4-thioxo- (9CI) (CA INDEX NAME)

587865-69-8 CAPLUS SH-Pyrrolo[3,2-d]pyrimidine-5-propanamide, N-{(4-chloropheny1)methy1]-7-cyano-1,4-dihydco-6-pheny1-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

S87865-75-6 CAPLUS SH-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-6-(2-furanyl)-1,4-dhydro-N-(2-pyridinylmethyl)-4-thioxo- (9CI) (CA INDEX NAME)

S87865-76-7 CAPLUS SH-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-6-phenyl-N-(3-pyridinylmethyl)-4-thloxo- (9CI) (CA INDEX NAME)

587865-77-8 CAPLUS
5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-6-(2-furanyl)-1,4-dihydro-N-(3-pyridinylmethyl)-4-thioxo- (9CI) (CA INDEX NAME)

587865-78-9 CAPLUS
5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, N-[2-(5-chloro-3-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
pyridinyl)ethyl]-7-cyano-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX
NAME)

RN 587865-79-0 CAPLUS

SH-Pyrcolo[3,2-d]pyrimidine-5-propanamide, N-[2-(5-chloro-3-pyridinyl)ethyl]-7-cyano-6-(2-furanyl)-1,4-dihydro-4-thioxo-(9CI) (CA 'NDEX NAME)

RN 587865-80-3 CAPLUS
CN Pyrrolidine, 1-(3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d|pyriadin-5-yl)-1-oxopropyl)- (9CI) (CA INDEX NAME)

RN 587865-81-4 CAPLUS
CN Piperidine, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Piperidine, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-4-methyl- (9CI) (CA INDEX NAME)

RN 587865-86-9 CAPLUS
CN Piperidine, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl)-3,5-dimethyl- (9CI) (CA INDEX NAME)

RN 587865-87-0 CAPLUS
CN 2-Piperidinecarboxylic acid, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 587865-88-1 CAPLUS
CN 3-Piperidinecarboxylic acid, 1-[3-[7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-, ethyl ester (9CI) (CA INDEX NAME)

Page 91

1.16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 597865-82-5 CAPLUS
CN Piperidine, 1-[3-[7-cyano-6-(2-furanyl)-1,4-dihydro-4-thioxo-5H-pyrcho[3,2-d]pyrimidin-5-yl]-1-oxopropyll; (9CI) (CA INDEX NAME)

RN 587865-83-6 CAPLUS
CN Piperidine, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl)-2-methyl- (9C1) (CA INDEX NAME)

RN 587865-84-7 CAPLUS
CN Piperidine, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipyrinidin-5-y1)-1-oxopropyl]-3-methyl- (9C1) (CA INDEX NAME)

$$\bigcap_{N} \bigcap_{N-CH_2-CH_2-C-N} \bigcap_{Me}$$

RN 587865-85-8 CAPLUS

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587865-89-2 CAPLUS

4-Piperidinecarboxylic acid, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl}-, ethyl ester (9CI) (CA INDEX NAME)

RN 587865-90-5 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[3-[7-cyano-6-(2-furanyl)-1,4-dihydro-4-thioxo-5H-pyrclo[3,2-d]pyrimidin-5-yl]-1-oxopropyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN \$87865-91-6 CAPLUS
CN 3-Piperidinecarboxamide, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyerold), 2-d)pyerimidin-5-yl)-1-охоргоруl]- (SCI) (CA INDEX NAME)

RN 587865-92-7 CAPLUS
CN 4-Piperidinecarboxamide, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]- (9Cl) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

$$\begin{picture}(20,0) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){100$$

587865-93-8 CAPLUS 58/865-93-8 CAPUS
4-Piperidinecarboxylic acid, 1-[3-[7-cyano-6-(2-furanyl)-1,4-dihydro-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]-1-oxopropyl]- (9CI) (CA INDEX

587865-94-9 CAPLUS
Piperidine, 4-benzoyl-1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]- [9CI) (CA INDEX NAME)

$$\bigcap_{h \in \mathcal{H}_2 - CH_2 - C}^{CN} \bigcap_{h \in \mathcal{H}_2 - CH_2 - C}^{O} \bigcap_{h \in \mathcal{H}_2 - C}^{O} \bigcap_{h \in \mathcal{H$$

S87865-95-0 CAPLUS
Piperidine, 4-benzoyl-1-[3-[7-cyano-6-(2-furanyl)-1,4-dihydro-4-thioxo-5Hpycrolo[3,2-d]pyrimidin-5-yl]-1-oxopropyl]- (9C1) (CA INDEX NAME)

ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 587867-24-1P 587867-25-2P 587867-26-3P 587867-27-4P 587867-28-5P 587867-29-6P 587867-30-9P 587867-31-0P 587867-31-0P 587867-31-4P 587867-42-1P 587867-40-1P 587867-41-2P 587867-42-1P 587867-40-1P 587867-41-2P 587867-41-4P 587867-41-4P 587867-41-4P 587867-41-4P 587867-41-4P 587867-51-4P 587867-42-P 587867-52-5P 587867-50-1P 587867-51-4P 587867-52-5P 587867-50-4P 587867-51-61-5P 587867-61-61-5P 587867-61-61-5P 587867-61-61-5P 587867-61-61-5P 587867-61-61-5P 587867-61-61-5P 587867-61-61-5P 587867-61-5P 587867-61-7P 587867-61-7P 587867-61-7P 587867-61-7P 587867-61-7P 587867-61-7P 587867-61-7P 587867-61-7P 587867-61-7P 587867-61-5P 587867-61-7P 587867-61-7P 587867-61-7P 587867-61-7P 587867-61-5P 587867-61-7P 587867-61-7P 587867-61-7P 587867-61-7P 587867-61-7P 587867-61-7P 587867-7P 587868-1P 587868

(Uses) (drug candidate: prepn. of pyrrolopyrimidine derivs. as GSK-3

(utug candidate; prepn. of pyrrolopyrimidine derivs. as GSX-3 inhibitors)
587865-96-1 CAPLUS
3-Piperidinecarboxamide, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-N,N-diethyl- (9CI) (CA INDEX NAME)

1,4-Dioxa-8-azaspiro[4.5]decane, 8-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl}-1-oxopropyl]- (9CI) (CA INDEX NAME)

L16 ANSWER' 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

\$87865-96-1P \$87865-97-2P \$87865-98-3P \$87865-99-4P \$87866-00-0P \$87866-01-1P \$87865-99-4P \$87866-00-3P \$87866-01-1P \$87866-03-2P \$87866-03-3P \$87866-03-3P \$87866-03-3P \$87866-03-3P \$87866-03-3P \$87866-03-3P \$87866-03-3P \$87866-03-3P \$87866-03-3P \$87866-11-3P \$87866-12-4P \$87866-11-3P \$87866-12-4P \$87866-11-3P \$87866-11-3P \$87866-12-4P \$87866-11-3P \$87866-11-3P \$87866-13-3P \$87866-12-3P \$87866-12-3P \$87866-22-6P \$87866-23-3P \$87866-23-3P \$87866-23-3P \$87866-23-3P \$87866-23-3P \$87866-23-3P \$87866-23-3P \$87866-23-3P \$87866-23-3P \$87866-33-3P \$87866-43-5P \$87866-33-3P \$87866-43-5P \$87866-33-3P \$87866-43-5P \$87866-33-3P \$87866-43-5P \$87866-33-3P \$87866-43-5P \$87866-33-3P \$87866-43-5P \$87866-33-3P \$87866-33-3P \$87866-43-5P \$87866-33-3P \$87866-43-5P \$87866-33-3P \$8786

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587865-98-3 CAPLUS Morpholine, 4-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-l-oxopropyl]- (9CI) (CA INDEX NAME)

587865-99-4 CAPLUS Morpholine, 4-[3-[7-cyano-6-(2-furany1)-],4-dihydro-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]-1-oxopropyl]- (9C1) (CA INDEX NAME)

587866-00-0 CAPLUS
Piperazinone, 4-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl)- (9CI) (CA INDEX NAME)

587866-01-1 CAPLUS

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Piperazine, 1-[3-(7-cyano-1,4-di)ydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-di)yrimidin-5-yl)-1-oxopropyl-4-methyl- (9C1) (CA INDEX NAME)

587866-02-2 CAPLUS
Piperazine, 1-[3-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-4-phenyl- (9CI) (CA INDEX NAME)

587866-03-3 CAPLUS Piperazine, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipyrimdin-5-yh]-1-oxopropyl]-4-(4-pyridinyl)- (9C1) (CA INDEX NAME)

$$\bigcap_{N = 1}^{H} \bigcap_{N = 1}^{CN} \bigcap_{N = 1}^{Ph} \bigcap_{N = 1}^{N} \bigcap_{N = 1}^{N$$

587866-04-4 CAPLUS
Piperazine, 1-(4-acetylphenyl)-4-(3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587866-09-9 CAPLUS
Piperazine, 1-acety1-4-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-y1)-1-oxopropyl]- (9CI) (CA INDEX NAME)

587866-10-2 CAPLUS
Piperazine, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-4-(2-furanylcarbonyl)- (9CI) (CA INDEX NAME)

587866-11-3 CAPLUS
Piperazine, 1-[3-[7-cyano-6-{2-furanyl}-1,4-dihydro-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yI]-1-oxopropyl]-4-(2-furanylcarbonyl)- (9CI)
(CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
S87866-05-5 CAPLUS
CN Piperazine, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-0xopropyl)-4-(ethoxyacetyl)- (9C1) (CA INDEX NAME)

587866-06-6 CAPLUS
Piperazine, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-4-(phenylmethyl)- (9CI) (CA INDEX NAME)

587866-07-7 CAPLUS
Piperazine, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-4-[2-(1-pyrrolidinyl)ethyl]- (9CI) (CAINDEX NAME)

$$\bigcap_{N \longrightarrow CH_2 - CH_2 - CH_2 - CH_2 - N}^{CN} \bigcap_{N \longrightarrow CH_2 - CH_2 - N}^{N \longrightarrow CH_2 - CH_2 - N} \bigcap_{N \longrightarrow CH_2 - CH_2 - N}^{N \longrightarrow CH_2 - CH_2 - N} \bigcap_{N \longrightarrow CH_2 - CH_2 - N}^{N \longrightarrow CH_2 - CH_2 - N} \bigcap_{N \longrightarrow CH_2 - CH_2 - N}^{N \longrightarrow CH_2 - CH_2 - N} \bigcap_{N \longrightarrow CH_2 - CH_2 - N}^{N \longrightarrow CH_2 - CH_2 - N} \bigcap_{N \longrightarrow CH_2 - CH_2 - CH_2 - N}^{N \longrightarrow CH_2 - CH_2 - CH_2 - N} \bigcap_{N \longrightarrow CH_2 - CH_2 - CH_2 - N}^{N \longrightarrow CH_2 - CH_2 - CH_2 - N} \bigcap_{N \longrightarrow CH_2 - CH_2 - CH_2 - CH_2 - CH_2 - N}^{N \longrightarrow CH_2 - CH_2 - CH_2 - N}$$

587866-08-8 CAPLUS
Piperazine, 1-(1,3-benzodioxol-5-ylmethyl)-4-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thoxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587866-12-4 CAPLUS
1-Piperazinecarboxylic acid, 4-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-, ethyl ester (9CI) (CA INDEX NAME)

587866-13-5 CAPLUS
1-Piperazinecarboxylic acid, 4-{3-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-6-phenyl-0,2-d|pyrimidin-5-y1)-1-oxopropyl}-, 1,1-dimethylethyl ester
(9C1) (CA INDEX NAME)

587866-14-6 CAPLUS
1-Piperazinecarboxylic acid, 4-[3-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5-pyprorolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587866-15-7 CAPLUS
CN 5H-Pyrcolo(3,2-d)pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-(3-(2-oxo-1-pyrcolidinyl)propyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-16-8 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-butanamide, N-butyl-7-cyano-1,4-dihydro-N-methyl-6-phenyl-4-thloxo- (9C1) (CA INDEX NAME)

RN 587866-17-9 CAPLUS
CN 5H-Pyrcolo[3.2-d]pyrimidine-5-butanamide, 7-cyano-1,4-dihydro-N-methoxy-N-methyl-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-18-0 CAPLUS
CN 5H-Pycrolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-N-cyclopentyl-1,4-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN SH-Pyrcolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-1,4-dihydro-N,6-diphenyl4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-23-7 CAPLUS CN 5H-Pyrrolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-1,4-dihydro-N-(2-hydroxyphenyl)-6-phenyl-4-thioxo- [9CI] (CA INDEX NAME)

RN 587866-24-8 CAPLUS
CN 5H-Pycrolo[3,2-d]pyrimidine-5-butanamide,.7-cyano-1,4-dihydro-N-(3-hydroxyphenyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-25-9 CAPLUS
CN 5H-Pyrcoloj3,2-djpyrimidine-5-butanamide, 7-cyano-1,4-dihydro-N-(4-hydroxyphenyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-26-0 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-N-(3-fluorophenyl)-1,4-dinydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

Page 94

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-19-1 CAPLUS CN SH-Pyrrolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-1,4-dihydro-N-methyl-N-(l-methyl-4-piperidinyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-20-4 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-N-(cyclopropylmethyl)1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-21-5 CAPLUS
CN 5H-Pyrcolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-1,4-dihydro-N-[3-(4-morpholiny1)propy1]-6-pheny1-4-thioxo- [9CI) [CA INDEX NAME]

RN 587866-22-6 CAPLUS

1.16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587866-27-1 CAPLUS
CN 5H-Pyrclo[3,2-d]pyrimidine-5-butanamide, 7-cyano-N-(4-fluorophenyl)-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-28-2 CAPLUS
CN 5H-Pyrcolo[3,2-d]pyrimidine-5-butanamide, N-(3-chlorophenyl)-7-cyano-1,4-dihydro-6-phenyl-4-thioko- (9CI) (CA INDEX NAME)

RN 587866-29-3 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-butanamide, N-(4-chlorophenyl)-7-cyano-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-30-6 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-S-butanamide, 7-cyano-1,4-dihydro-N-(2-methoxyphenyl)-6-phenyl-4-thioxo- [9CI] (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587866-31-7 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-1,4-dihydro-N-(3-methoxyphenyl)-6-phenyl-4-thioxo- (9Ci) (CA INDEX NAME)

RN 587866-32-8 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-1,4-dihydro-N-(3-nitrophenyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-33-9 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-N-[4(cyanomethyl)phenyl]-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-34-0 CAPLUS CN 5H-Pycrolo[3,2-d]pyrimidine-5-butanamide, N-(4-acetylphenyl)-7-cyano-1,4-dihydro-6-phenyl-4-thiowo-(9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued thiazolyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-39-5 CAPLUS
CN SH-Pycrolo(3,2-d)pyrimidine-5-butanamide, 7-cyano-1,4-dihydro-6-phenyl-N-(phenylmethyl)-4-thioxo- (9C1) (CA INDEX NAME)

RN 587866-40-8 CAPLUS
CN 5H-Pyrcolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-N-[(4-fluorophenyl)methyl]-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-41-9 CAPLUS
CN 5H-Pyrrolo(3,2-d)pyrimidine-5-butanamide, N-[(4-chlorophenyl)methyl]-7cyano-1,4-dihydro-6-phenyl-4-thioxo- (9C1) (CA INDEX NAME)

$$\stackrel{\text{CN}}{\underset{N}{\longleftarrow}} \stackrel{\text{Ph}}{\underset{N \leftarrow (\text{CH}_2)}{\bigvee}} \stackrel{\text{O}}{\underset{N \leftarrow \text{CH}_2 \leftarrow \text{CH}_2}{\bigvee}} \stackrel{\text{C1}}{\underset{N \leftarrow \text{CH}_2 \leftarrow \text{CH}_2}{\bigvee}}$$

RN 597866-42-0 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-1,4-dihydro-N-[(4-methoxyphenyl)methyl]-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587866-35-1 CAPLUS CN 5H-Pyrrolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-N-(4-ethynylphenyl)-1,4dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-36-2 CAPLUS
CN SH-Pyrcolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-1,4-dihydro-6-phenyl-N-2-pyridinyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-37-3 CAPLUS
CN SH-Pyrcolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-1,4-dihydro-6-phanyl-N-4-pyridinyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-38-4 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-1,4-dihydro-6-phenyl-N-2-

LIG ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587866-43-1 CAPLUS
CN SH-Pyrcolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-1,4-dihydro-6-phenyl-N-(2-phenylethyl)-4-thioxo-(9CI) (CA INDEX NAME)

RN 587866-44-2 CAPLUS
CN 5H-Pyrcolo[3,2-d]pyrinidine-5-butanamide, 7-cyano-N-[2-(4-fluorophenyl)=byl]-1,4-dihydro-6-phenyl-4-thioxo-(9CI) (CA INDEX NAME)

$$\begin{picture}(20,10) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){10$$

RN 587866-45-3 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-N-(2-furanylmethyl)-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-46-4 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-1,4-dihydro-6-phenyl-N(2-thienylmethyl)-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Contin

RN 597866-47-5 CAPLUS
CN 5H-Pyrcolol3.2-d]pyrimidine-5-butanamide, 7-cyano-1,4-dihydro-6-phenyl-N-(2-pyridinylmethyl)-4-thioxo- (9C1) (CA INDEX NAME)

RN 587866-48-6 CAPLUS
CN Piperidine, 1-{4-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipyrinidin-5-yl)-1-oxobutyl]- (9CI) (CA INDEX NAME)

RN 587866-49-7 CAPLUS
CN Piperidine, l-[4-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)-l-oxobutyl]-3-methyl- (9Cl) (CA INDEX NAME)

RN 587866-50-0 CAPLUS
CN Piperidine, 1-[4-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipyrinidin-5-yl)-1-oxobutyl]-4-methyl- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587866-54-4 CAPLUS
CN 3-Piperidinecarboxamide, 1-[4-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxobutyl- (9CI) (CA INDEX NAME)

RN 587866-55-5 CAPLUS
CN 4-Piperidinecarboxamide, 1-[4-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxobutyl]- (9CI) (CA INDEX NAME)

RN 587866-56-6 CAPLUS
3-Piperidinecarboxamide, 1-[4-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxobutyl]-N,N-diethyl- (9CI) (CA INDEX NAME)

RN 587866-58-8 CAPLUS
CN 1,4-Dioxa-8-azaspiro[4.5]decane, 8-[4-(7-cyano-1,4-dihydro-6-phenyl-4-Page 96.

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587866-51-1 CAPLUS
CN 2-Piperidinecarboxylic acid, 1-[4-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)-1-oxobutyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 587866-52-2 CAPLUS
CN 3-Piperidinecarboxylic acid, l-[4-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-SH-pycrolo[3,2-d]pyrimidin-5-yl}-l-oxobutyl}-, ethyl ester (9CI) (CA INDEX NAME)

RN 587866-53-3 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[4-[7-cyano-1,4-dihydro-6-phenyl-4-thioxo5H-pyrcolo[3,2-d]pyrimidin-5-yl}-1-oxobutyl]-, ethyl ester [9CI] (CA .
INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) thioxo-5H-pycrolo[3,2-d]pycimidin-5-yl)-1-oxobutyl]- (9CI) (CA INDEX

RN 587866-60-2 CAPLUS
CN Piperidine, 1-[4-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl)-1-oxobutyl]-4-(1-pyrcolidinyl)- (9Cl) (CA INDEX NAME)

RN 587866-62-4 CAPLUS
CN 3-Piperidinecarboxylic acid, 1-[4-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxobutyl]-4-oxo-, methyl ester (9CI) (CA\:INDEX NAME)

RN 587866-64-6 CAPLUS CN Piperazinone, 4-[4-{7-cyáno-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo{3,2-d}pyrimidin-5-yl)-l-oxobutyl}- (9CI) (CA INDEX NAME) L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587866-65-7 CAPLUS
CN Piperazine, 1-[4-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxobutyl]-4-methyl- (SCI) (CA INDEX NAME)

CN Ph O N Me

RN 587866-66-8 CAPLUS
CN Piperazine, 1-[4-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dlpyrimidin-5-yl)-1-oxobuty]]-4-phenyl- (SCI) (CA INDEX NAME)

CN Ph O Ph Ph

RN 587866-67-9 CAPLUS
CN Piperazine, 1-[4-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipyrimidin-5-yl)1-loxobutyl]-4-(4-pyridinyl)- (9CI) (CA INDEX NAME)

RN 587866-68-0 CAPLUS
CN Piperazine, 1-(4-acetylphenyl)-4-[4-(7-cyano-1,4-dihydro-6-phenyl-4-thioxoSH-pyrcolo[3,2-d-]pyrimidin-5-yl)-1-oxobutyl]- (SCI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587866-72-6 CAPLUS
CN Piperazine, 1-acetyl-4-[4-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcole[3,2-d] pyrimidin-5-yl)-1-oxobutyl]- (9C1) (CA INDEX NAME)

RN 587866-73-7 CAPLUS
CN Piperazine, 1=[4-{1-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl}-1-oxobutyl]-4-(2-furanylcarbonyl)- (9CI) (CA INDEX NAME)

RN 587866-74-8 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[4-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl}-1-oxobutyl}-, ethyl ester (9CI) (CA INDEX NAME)

RN 587866-75-9 CAPLUS

Page 97

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587866-69-1 CAPLUS
CN Piperazine, l-[4-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxobutyl]-4-(phenylmethyl)-. (9CI) (CA INDEX NAME)

RN 587866-70-4 CAPLUS
CN Piperazine, 1-[4-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxobutyl]-4-[2-(1-pyrrolidinyl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{picture}(20,0) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){100$$

RN 587866-71-5 CAPLUS
CN Piperazine, 1-{1,3-benzodioxol-5-ylmethyl}-4-{4-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo{3,2-d}pyrimidin-5-yl}-1-oxobutyl}- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN 1-Piperazinecarboxylic acid, 4-[4-(7-cyano-1,4-dihydro-6-phenyl-4-thioxoSH-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxobutyl]-, phenylmethyl ester (9Cf)
(CA INDEX NAME)

RN 587866-76-0 CAPLUS

SH-Pyrrolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-1,4-dihydro-N-[3-(2-oxo-1-pyrrolidiny1)propy1]-6-pheny1-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-77-1 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-N-[2-(3-fluorophenyl)ethyl]-1.4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-78-2 CAPLUS
SH-Pyrcolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-1,4-dihydro-N-(4-methoxyphenyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587866-79-3 CAPLUS
CN SH-Pyrrolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-1,4-dihydro-N-[4-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) (methylthio)phenyl}-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

\$87866-80-6 CAPLUS 1H-Azepine, 1-3(-7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]hexahydro- (9C1) (CA INDEX NAME)

$$\stackrel{\mathsf{CN}}{\underset{\mathsf{f}}{\bigvee}} \stackrel{\mathsf{Ph}}{\underset{\mathsf{f}}{\bigvee}} \stackrel{\mathsf{O}}{\underset{\mathsf{f}}{\bigvee}} \stackrel{\mathsf{Ph}}{\underset{\mathsf{f}}{\bigvee}} \stackrel{\mathsf{O}}{\underset{\mathsf{f}}{\bigvee}} \stackrel$$

587866-81-7 CAPLUS
Piperidine, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-4-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)

587866-82-8 CAPLUS Thiomorpholine, 4-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d)pyrimdin-5-yl)-1-oxopropyl]- (9C1) (CA INDEX NAME)

587866-83-9 CAPLUS

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587866-87-3 CAPLUS
Piperidine, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-2-ethyl- (9CI) (CA INDEX NAME)

587866-88-4 CAPLUS .
Piperidine, 4-acetyl-1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-4-phenyl- (9CI) (CA INDEX MANE)

587866-89-5 CAPLUS 1,4"-Bipiperidine, 1"-(3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo(3,2-d)pyrimidin-5-yl)-1-oxopropyl)- (9C1) (CA INDEX NAME)

587866-90-8 CAPLUS
Carbamic acid, [1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-3-pyrrolidinyl}-, 1,1-dimethylethyl ester
(SCI) (CA INDEX NAME)

Page 98

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Piperidine, 4-bromo-1-[3-(7-cyano-1,4-dihydco-6-phenyl-4-thioxo-5H pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]- (9CI) (CA INDEX NAME)

S87866-84-0 CAPLUS 1-Piperazineethanol, 4-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-l-oxopropyl]- (9CI) (CA INDEX NAME)

587866-85-1 CAPLUS Quinoline, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrindin-5-yl)-1-oxopropyl]decahydro- (9CI) (CA INDEX NAME)

587866-86-2 CAPLUS
Azocine, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]octahydro- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 587866-91-9 CAPLUS
CN L-Pcline, 1-(3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

587866-92-0 CAPLUS
Proline, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-, methyl ester [9CI) (CA INDEX NAME)

587866-93-1 CAPLUS L-Proline, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

587866-94-2 CAPLUS L-Proline, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

587866-95-3 CAPLUS
Pycrolldine, 1-(3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pyrindin-5-yl)-1-oxopropyl}-2-(methoxymethyl)- (9CI) (CA INDEX NAME)

587866-96-4 CAPLUS
Pyctdine, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipyrimdin-5-yl]-1-oxopropyl]-1,2,3,6-tetrahydro-(9CI) (CA INDEX NAME)

$$\bigcap_{N \to \infty} \bigcap_{N \to \infty} \bigcap_{CH_2 - CH_2 - C \to \infty} \bigcap_{N \to \infty}$$

S87866-97-5 CAPLUS
3-Piperidinol. 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pycrolo[3,2-d]pycimidin-5-yl)-1-oxopropyl|- (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

S87867-02-5 CAPLUS 4-Piperidinol, 1-(3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d)yrimidin-5-y)-1-oxopropyl- (9CT) (CA INDEX NAME)

S87867-03-6 CAPLUS
Piperazine, 1-{3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcolo(3,2-d)pyrimidin-5-yl)-1-oxopropyl)-4-(2-pyrimidinyl)- (9CI) (CA INDEX NAME)

587867-04-7 CAPLUS
Piperidine, 4-(4-chlorophenyl)-1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]- (9CI) (CA INDEX NAME)

$$\bigcap_{N} \bigcap_{N-CH_2-CH_2-C-N} \bigcap_{C1} \bigcap_$$

587867-05-8 CAPLUS Piperidine, 1-[3-(7-cyano-1,4-dihydro-6-phpnyl-4-thioxo-5H-pyrcolo[3,2-dipyrindin-5-yi)-1-oxopropyl]-4-(phenylmethyl)- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

S87866-98-6 CAPLUS

CN | Piperidine, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-dipyrimidin-5-yl)-1-oxopropyl]-2,6-dimethyl- (9CI) (CA INDEX NAME)

587866-99-7 CAPLUS
2-Piperidineethanol, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]- (9CI) (CA INDEX NAME)

587867-00-3 CAPLUS
3-Piperidinemethanol, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl}-1-oxopropyl]- (9CI) (CA INDEX NAME)

587867-01-4 CAPLUS
Piperazine, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-4-(2-pyridinyl)- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

$$\bigcap_{N = 1}^{H} \bigcap_{N-CH_2-CH_2-C}^{CN} \bigcap_{N = 1}^{C} \bigcap_{N-CH_2-Ph}^{CH_2-Ph} \bigcap_{N = 1}^{C} \bigcap_{N = 1$$

S87867-06-9 CAPLUS
Isoquinoline, 2-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl}decahydro-, (4aR,8aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

587867-07-0 CAPLUS
Isoquinoline, 2-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl)decahydro-, (4aR,8aR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

587867-08-1 CAPLUS
Piperazine, 1-[(4-chlorophenyl)methyl]-4-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thloxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl}- (9CI) (CA INDEX

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continu

RN 587867-09-2 CAPLUS
CN Carbamic acid, [[1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-3-piperidinyl]methyl]-, l,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 587867-10-5 CAPLUS
Carbamic acid, [2-[1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-4-piperidinyl]ethyl]-, l,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 587867-11-6 CAPLUS
Carbamic acid, [1-[3-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-4-piperidinyl}-, 1,1-dimethylethyl ester (9C1) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587867-16-1 CAPLUS
CN 5H-Pytrol6[3,2-d]pytimidine-5-propanamide, 7-cyano-1,4-dihydro-6-(3-methyl-2-furanyl)-N-1-piperidinyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-17-2 CAPLUS
CN Carbamic acid, [5-[[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]amino]pentyl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 587867-18-3 CAPLUS
Carbamic acid, [2-[[3-(7-cyano-1.4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]amino]ethyl}-, 1,1-dimethylethyl ester [9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continu

$$\bigcap_{N \to \infty} \bigcap_{N \to \infty} \bigcap_{N$$

RN 587867-12-7 CAPLUS
CN Piperidine, l-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-4-(2,3-dihydro-2-oxo-1H-benzimidazol-1-yl)-(9C1) (CA INDEX NAME)

RN 587867-13-8 CAPLUS
CN 4-Piperidinemethanol, 1-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrcole[3,2-d]pyrimidin-5-yl)-1-oxopropyl]- (9CI) (CA INDEX NAME)

RN 587867-15-0 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[[3-[7-cyano-1,4-dihydro-6-(3-methyl-2-fucanyl)-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl]-1-oxopropyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587867-19-4 CAPLUS
CN Carbamic acid, [2-[[3-(7-cyano-]1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]amino]ethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 597867-20-7 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-(2-methylpropyl)-6-phenyl-4-thloxo- (9CI) (CA INDEX NAME)

RN 587867-21-8 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-(2-methoxyethyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-22-9 CAPLUS
CN SH-Pyrcolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydco-N,N-bis[2-,methylpropyl]-6-phenyl-4-thioxo- (SCI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

587867-23-0 CAPLUS 5H-Pyrcolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-N-[2-(dimethylamino)ethyl]-N-ethyl-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587867-24-1 CAPLUS SH-Pyrcolo[],2-pyrimidine-5-propanamide, 7-cyano-N-[2-(diethylamino)ethyl]-1,4-dihydro-N-methyl-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587867-25-2 CAPLUS SH-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-N-(2-ethoxyethyl)-1,4-dihydro-6-phenyl-N-(phenylmethyl)-4-thioxo- (9CI) (CA INDEX NAME)

587867-26-3 CAPLUS

ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
587867-30-9 CAPLUS
5H-Pyrcolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-6-phenyl-N-propyl-4-thioxo- (9C1) (CA INDEX NAME)

587867-31-0 CAPLUS 5H-Pyrcolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-[2-(4-morpholiny])ethyl]-6-phenyl-4-thloxo- (9CI) (CA INDEX NAME)

587867-32-1 CAPLUS 5H-Pyrcolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-[3-(2-methyl-1-piperidinyl)propyl]-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

S87867-33-2 CAPLUS SH-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-[3-(4-morpholiny)propyl]-6-phenyl-4-thiomo- (SCI) (CA INDEX NAME)

597867-34-3 CAPLUS 5H-Pycrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-N-(2-cyclohexylethyl)-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

# Page 101

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN SH-Pyrcolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-6-phenylN,N-dipropyl-4-thioxo- (9CI) (CA INDEX NAME)

$$\bigcap_{N} \bigcap_{N} \bigcap_{N} \bigcap_{CH_2-CH_2-C-N} \bigcap_{N} \bigcap_{(Pr-n)_2} \bigcap_{N} \bigcap_{$$

587867-27-4 CAPLUS 5H-Pyrcolo[3,2-d]pyrimidine-5-propanamide, N,N-dibutyl-7-cyano-1,4-dihydco-6-phenyl-4-thioxo-(9CI) (CA INDEX NAME)

597867-29-5 CAPLUS 5H-Pyrcolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-methyl-6-phenyl-4-thioxo- [9CI] (CA INDEX NAME)

587867-29-6 CAPLUS 5H-Pyrcolo[3,2-djpyrimidine-5-propanamide, 7-cyano-N-ethyl-1,4-dihydro-6-phenyl-4-thioxo- [9C1] (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

$$\bigcap_{N \longrightarrow CH_2 - CH_2 - C}^{CN} \bigcap_{N \longrightarrow CH_2 - CH_2$$

587867-35-4 CAPLUS 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N,N-dimethyl-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

597867-36-5 CAPLUS 5H-Pyrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-(1-methylethyl-6-phenyl-N-(phenylmethyl)-4-thioxo- (9CI) (CA INDEX NAME)

587867-37-6 CAPLUS Glycine, N-[3-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-exopropyl]-N-methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

587867-38-7 CAPLUS
5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-d1hydro-N-methyl-6-phenyl-N-2-propynyl-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587867-39-8 CAPLUS
CN 5H-Pytrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-methyl-6-phenyl-N-2-propenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-40-1 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-6-phenylN,N-bis(phenylmethyl)-4-thioxo- (9CI) (CA INDEX NAME)

$$\begin{picture}(20,0) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){100$$

RN 587867-41-2 CAPLUS CN 5H-Pytrolof(3,2-d)pytimidine-5-propanamide, 7-cyano-1,4-dihydro-N-methyl-N-(1-methyl-3-pytrolidinyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-42-3 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-N-(1,3-dioxolan-2ylmethyl)-1,4-dihydro-N-methyl-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) - methyl-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-47-8 CAPLUS CN 5H-Pycrold(3,2-d)pycimidine-5-propanamide, 7-cyano-N-cyclohexyl-1,4dihydro-N-methyl-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 597867-48-9 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, N-butyl-7-cyano-1,4-dihydro-N-methyl-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-49-0 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-N-ethyl-1,4-dihydro-6-phenyl-N-propyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-50-3 CAPLUS
SH-Pyrroloi3, 2-d)pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-(2-methoyethyl)-N-methyl-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587867-43-4 CAPLUS

Glycine, N-[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]-N-methyl-, ethyl ester (9CI) (CA INDEX NAME)

RN 587867-44-5 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-N-cyclopentyl-1,4-dihydro-6-phenyl-N-2-propenyl-4-thioxo- (9CI) (CA INDEX NAME)

$$\begin{picture}(20,0) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){100$$

RN 587867-45-6 CAPLUS
CN SH-Pyrcolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N,N-bis(1-meth)lethyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

$$\bigcap_{N \in \mathcal{N}} \bigcap_{Ch_2 - Ch_2 - C - N} \bigcap_{(Pr-i)_2} \bigcap_{Ch_2 - Ch_2 - C - N} \bigcap_{(Pr-i)_2} \bigcap_{Ch_2 - Ch_2 - C - N} \bigcap_{(Pr-i)_2} \bigcap_{(Pr-i)$$

RN 587867-46-7 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-N-ethyl-1,4-dihydro-N-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587867-51-4 CAPLUS
CN 5M-Pyrcolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-methyl-N-(l-methylethyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-52-5 CAPLUS
CN 5H-Pytrolo[3,2-d]pytimidine-5-propanamide, N-[2-(acetylamino)ethyl]-7cyano-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-53-6 CAPLUS
CN Benzoic acid, 4-[[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]amino]-, methyl ester (9CI) (CA INDEX NAME)

RN 587867-54-7 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-6-phenyl-4-thioxo-N-[4-{trifluoromethoxy})phenyl}- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN . (Continued)

RN 587867-55-8 CAPLUS
CN 5H-Pyrcolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-[4-(methylthio)phenyl-6-phenyl-4-thioxo-(9CI) (CA INDEX NAME)

RN 587867-56-9 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, N-[4-(aminosulfonyl)phenyl]-7cyano-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-57-0 CRPLUS CN 5H-Pyrcolo[3,2-d|pyrimidine-5-propanamide, N-1,3-benzodioxol-5-yl-7-cyano-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-58-1 CAPLUS
CN 5H-Pyrrolo[3.2-d]pyrimidine-5-propanamide, 7-cyano-N-(3,5-dimethoxyphenyl)-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587867-62-7 CAPLUS
CN 5H-Pyrrolo[3.2-d]pyrimidine-5-propanamide, 7-cyano-6-cyclopropyl-1,4-dihydro-N-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-63-8 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-propanoic acid, 7-cyano-6-(2-furanyl)-1,4-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-64-9 CAPLUS
CN 5H-Pytrol[3,2-d]pyrimidine-5-propanoic acid, 7-cyano-6-(2-furanyl)-1,4-dihydco-4-thioxo-, ethyl ester (9CI) (CA INDEX NAME)

RN 587867-65-0 CAPLUS
CN 5H-Pyrcolo[3,2-d]pyrimidine-5-butanoic acid, 7-cyano-1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 1,4-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN \$87867-59-2 CAPLUS
CN Benzoic acid, 3-[[3-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

RN 587867-60-5 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-N-(3-nitrophenyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

$$\bigcap_{N \to \infty} \bigcap_{N \to \infty} \bigcap_{N$$

RN 587867-61-6 CAPLUS
CN 58F-Pycrol(3), 2-d|pyrimidine-5-propanamide, N-(3-(aminocacbonyl)phenyl]-7cyano-1,4-dihydco-6-phenyl-4-thioxo-(9CI) (CA INDEX NAME)

$$\bigcap_{N \longrightarrow CH_2 - CH_2 - CH_2 - CH_3}^{CN} \bigcap_{N \longrightarrow CH_2 - CH_3 - CH_3}^{Ph} \bigcap_{N \longrightarrow CH_2 - CH_3 - CH_3 - CH_3}^{CN} \bigcap_{N \longrightarrow CH_3 - CH$$

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587867-66-1 CAPLUS
CN 5H-Pyrclo[3,2-d]pyrimidine-5-butanoic acid, 7-cyano-1,4-dihydro-4-oxo-6-phenyl-, ethyl ester (9C1) (CA INDEX NAME)

RN 587867-67-2 CAPLUS CN 5H-Pycrol[3,2-d]pycimidine-5-butanoic acid, 7-cyano-1,4-dihydro-6-phenyl-4-thioxo-, ethyl ester (9CI) (CA INDEX NAME)

RN 587867-68-3 CAPLUS
CN 5H-Pyrrolo[3,2-d]pyrimidine-5-propanoic acid, 7-cyano-6-cyclopropyl-1,4-dihydro-4-thioxor, methyl ester (9CI) (CA INDEX NAME)

RN 587867-69-4 CAPLUS
CN IH-Pyrcolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-5-(3-oxobutyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN . (Continued

RN 587867-70-7 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-(3-cyclohexyl-3-oxopropyl)4,5-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-71-8 CAPLUS CN HH-Fyrrolo(3,2-d|pyrimidine-7-carbonitrile, 4,5-dihydro-5-(3-oxo-4phenylbutyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-72-9 CAPLUS
CN 1-Piperidinecarboxamide, 4-[3-{7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-d]pyrimidin-5-yl)-1-oxopropyl]- (9CI) (CA INDEX NAME)

RN 587867-73-0 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(4-oxopentyl)-6-phenyl-4-thioxo-(9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) d]pyrimidin-5-yl)-1-oxobutyl]-1-(methylsulfonyl)- (9CI) (CA INDEX NAME)

RN 587867-78-5 CAPLUS
CN HH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(dimethylamino)-4,5-dihydro-4-thloxo-(9C1) (CA INDEX NAME)

RN 587867-79-6 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(1-pyrrolidinyl)4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-80-9 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(1-piperidinyl)4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-81-0 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(3-hydroxy-1-piperidinyl)-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 597867-74-1 CAPLUS
CN IH-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 5-(4-cyclohexyl-4-oxobutyl)4,5-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-75-2 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(4-oxo-4-phenylbutyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

$$\begin{picture}(20,10) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){10$$

RN 587867-76-3 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(4-oxo-5-phenylpentyl)-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-77-4 CAPLUS
CN Pyrrolidine, 3-[4-(7-cyano-1,4-dihydro-6-phenyl-4-thioxo-5H-pyrrolo[3,2-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587867-82-1 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylethoxy)propyl]-6-[(1-methylethyl)amino]-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-83-2 CAPLUS
CN HH-Pycrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(cyclopentylamino)-4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-84-3 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-[(4-aminocyclohexyl)amino]4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-thioxo-(9CI) (CA INDEX NAME)

RN 587867-85-4 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-[(2-hydroxyethyl)amino]-5-[3-(1-methylethoxy)propyl]-4-thioxo- [9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587867-86-5 CAPLUS
CN HH-Pyrclo[3,2-d]pyrimidine-7-carbonitrile, 6-(dimethylamino)-4,5-dihydro5-[3-(1-methylethoxy)propyl]-4-thioxo-(9CI) (CA INDEX NAME)

RN 587867-87-6 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(ethylmethylamino)-4,5-dihydro-5-(3,-1-methylethoxy)propyl]-4-thioxo-(9CI) (CA INDEX NAME)

RN 587867-88-7 CAPLUS

1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylethoxy)propyl]-6-(methyl-2-propenylamino)-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-89-8 CAPLUS

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587867-93-4 CAPLUS
CN 1H-Pycrolo(3,2-d)pycimidine-7-carbonitrile, 6-[(3R)-3-amino-1-pycrolidinyl]-4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-thioxo-(9CI)(CA INDEX NAME)

Absolute stereochemistry.

RN 587867-94-5 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-{(35)-3-amino-1-pyrrolidinyl]-4.5-dihydro-5-[3-(1-methylethoxy)propyl]-4-thioxo-(9CI)(CA INDEX NAME)

Absolute stereochemistry.

RN 587867-95-6 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylethoxy)propyl]-6-(1-piperidinyl)-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN 1H-Pycrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-{1-methylethoxy}propyl]-6-(methyl-2-propynylamino)-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-90-1 CAPLUS
CN 1H-Pycrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-{{2-hydroxyethyl]methylamino]-5-{3-(1-methylethoxy)propyl]-4-thioxo-(9CI) (CA INDEX NAME)

RN 587867-91-2 CAPLUS
CN HH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4.5-dihydro-5-[3-(1-methylethoxy)propyl]-6-(1-pyrrolidinyl)-4-thioxo- (9C1) (CA INDEX NAME)

RN 587867-92-3 CAPLUS
CN 1H-Pycrolo[3,2-d]pycimidine-7-carbonitcile, 4,5-dihydro-6-(3-hydroxy-1-pycrolidinyl)-5-[3-(1-methylethoxy)propyl)-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSVER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 587867-96-7 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-(3,5-dimethyl-1-piperidinyl)4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-thioxo-(9CI) (CA INDEX NAME)

RN 587867-97-8 CAPLUS

CN H-Pyrcoloj, 2-djpyrimidine-7-carbonitrile, 4,5-dihydro-6-(3-hydroxy-1-piperidiny)1-5-[3-(1-methylethoxy)propy]]-4-thloxo- (9CI) (CA INDEX NAME)

RN 587867-98-9 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-[4-(aminomethyl)-1-piperidinyl]-4.5-dihydro-5-[3-(1-methylethoxy)propyl]-4-thioxo- (9CI) (CA INDEX NAME)

RN 587867-99-0 CAPLUS CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN [Continued]
methylethoxy)propyl]-6-[4-(4-pyridinyl)-1-piperazinyl]-4-thioxo- (9CI)
(CA INDEX NAME)

RN 587868-00-6 CAPLUS
CN HH-Pyrcoloj,2-djpyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylethoxy)propyl]-6-(4-morpholinyl)-4-thioxo-(9CI) (CA INDEX NAME)

i-Pro- (CH2) 3

RN 587868-01-7 CAPLUS
CN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylethoxy)propyl]-6-(1-piperazinyl)-4-thioxo-(9C1) (CA INDEX NAME)

1-PrO-(CH2)3

RN 587868-02-8 CAPLUS

(IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylethoxy)propyl]-6-(4-methyl-1-piperazinyl)-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Conti

i-PrO- (CH2) 3

RN 587868-06-2 CAPLUS
CN IH-Pyrcolof3,2-d]pyrimidine-7-carbonitrile, 6-(hexahydro-1H-azepin-1-yl)4,5-dihydro-5-[2-(i-methylethoxy)propyl]-4-thioxo-(9CI) (CA INDEX NAME)

S (CH2) 3 - OPr-i

RN 587868-07-3 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(hexahydro-1H-1,4-diazepin-1-yl)-4,5-dihydro-5-[3-(1-methylethoxy)propyl]-4-thioxo- (9CI) (CA INDEX

i-Pro-(CH2)3

RN 587868-08-4 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-(IH-imidazol-1-yl)-5-[3-(1-methylethoxy)propyl]-4-thioxo- (9CI) (CA INDEX NAME)

S (CH<sub>2</sub>)<sub>3</sub>-OPr-i

RN 587868-09-5 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylethoxy)propyl]-6-(2-methyl-1H-imidazol-1-yl)-4-thioxo- (9CI) (CA INDEX NAME)

Page 106

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

i-Pro- (CH2) 3

IN 587868-03-9 CAPLUS IN IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylethoxy)propyl]-6-[4-[2-(1-pyrrolidinyl)ethyl]-1-piperazinyl]-4-thioxo- (9CI) (CA INDEX NAME)

1-Pro-(CH2) 3

N N CH2-CH2-N

N CN

RN 587868-04-0 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-[4-(2-hydroxyethyl)-1-piperazinyl)-5-[3-(1-methylethoxy)propyl]-4-thioxo-(9CI)
(CA INDEX NAME)

1-Pro-(CH2)3 NNNNNCH2-CH2-OH

RN 587868-05-1 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[3-(1-methylethoxy)propyl]-6-(3-oxo-1-piperazinyl)-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

i-Pro- (CH2) 3

RM 587868-10-8 CAPLUS
CN Benzenecarbothioamide, N-[2-[7-cyano-6-(cyclopropylamino)-1,4-dihydro-4-thioxo-5H-pyrcolo[3,2-d]pyrimidin-5-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 587868-11-9 CAPLUS
CN Benzamide, N-[2-{7-cyano-1,4-dihydro-6-(3-hydroxy-1-pyrrolidiny1)-4-thioxo-5H-pyrrolid;2-djpyrimidin-5-yljethyl]-4-fluoro- (9Cl) (CA INDEX NAME)

CN NH OH NH CH2- CH2- CH2- NH-C

RN 587870-12-0 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2,5-dimethylphenyl)-4,5-dihydro-4-oxo- (9CI) (CA INDEX NAME)

O Me H N CN

RN 587870-13-1 CAPLUS
CN 1H-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 6-(2,5-dimethylphenyl)-4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

587870-14-2 CAPLUS IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-(2-furanyl)-4,5-dihydro-5-methyl-4-thioxo- (9CI) (CA INDEX NAME)

587870-15-3 CAPUS 5H-Pyrcolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-6-(3-methyl-2-furanyl)-N-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

587870-16-4 CAPLUS 56-Pyrcolo[3,2-d]pyrimidine-5-propanamide, 7-cyano-1,4-dihydro-6-(3-methyl-2-furanyl)-N-(3-pyridinylmethyl)-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 7 OF 60 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2003:396457 CAPLUS DOCUMENT NUMBER: 138:385446

DOCUMENT NUMBER: TITLE:

138:385446
Preparation of 9-deazaguanine derivatives as inhibitors of GSK-3 and ROCK kinase
Cao, Jingrong: Choquette, Debbie: Davies, Robert; Forster, Cornelia: Lauffer, David: Pierce, Albert: Tomlinson, Ronald: Wannamaker, Marion; Metz, Natalie INVENTOR (S):

Tomlinson, Ronald: Wannamaker. USA U.S. Pat. Appl. Publ∴, 38 pp. CODEN: USXXCO Patent English 2 PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 2003096813 A1 20030522 US 2002-125885 20020419 <-PRIORITY APPLN. INFO:
US 2001-285217P P 20010420 <-OTHER SOURCE(S):
HARPAT 138:385446
US 2001-285217P P 20010420 <-OTHER SOURCE(S):
RI: PAC (Pharmacological activity): RCT (Reactant): SPN (Synthetic
preparation): TRU (Therapeutic use): BIOL (Biological study): PREP
(Preparation): RACT (Reactant or reagent): USES (Uses)
(drug candidate: preparation of 9-deazaguanine derivs. as inhibitors of
GSK-3 and ROCK kinase)
N 383161-28-2 CAPLUS
CN 1H-Pyrrolo[3].2-d]pytimidine-7-carbonitrile, 4,5-dihydro-6-methyl-4-oxo-5phenyl- (9CI) (CA INDEX NAME)

CAPLUS 4/399-15-2 CARBUS Carbamic acid, [2-{7-cyano-5-ethyl-4,5-dihydro-4-oxo-1H-pyrrolo[3,2-d]pyrimidin-6-yl)ethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

473997-36-3 CAPLUS HH-Pyrcolo(1,2-d)pyrimidine-7-carbonitrile, 5-ethyl-4,5-dihydro-4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

Page 107

L16 ANSWER 6 OF 60 -CAPLUS -COPYRIGHT 2007 ACS on STN (Continued)

RN 587870-17-5 CAPLUS

CN 5H-Pycrolo[3,2-d]pyrimidine-5-butanamide, 7-cyano-N-(1-ethylpropyl)-1,4dihydro-6-phenyl-4-thioxo-(9CI) (CA INDEX NAME)

GI

MOITI-step

multi-step
synthesis in good yield. Some of compds. I showed IC50 of <10 nM against
GSK-3. I are useful as remedies or preventives for diseases in which
GSK-3 participates such as diabetes, diabetic complications, Alzheimer's
disease, neurodegenerative disease, depression, mania, traumatic brain
injury, hair loss, inflammatory diseases, cancer, immunodeficiency (no
data). Formulations containing I as an active ingredient were also
described.
REFERENCE COUNT:

4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMA

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 7 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

473997-03-4P 473997-05-6P 473997-15-8P
473997-16-9P 473997-22-7P 473997-35-2P
473997-38-5P 473998-07-1P 473998-08-2P
473998-03-9P 473998-10-6P 473998-11-7P
473998-12-8P 473998-13-9P 473998-14-0P
473998-15-1P 473998-16-2P 473998-17-3P
473998-12-1P 473998-19-5P 473998-20-8P
473998-21-9P 473998-22-0P 473998-23-1P
EL: PAC (Pharmacological activity): SPN (Synthetic preparation): THU (Therapeutic use): BIOL (Biological study): PREP (Preparation): USES (Uses)

(Uses)
(drug candidate: preparation of 9-deazaguanine derivs. as inhibitors of GSK-3 and ROCK kinase)
473997-03-4 CAPLUS
HI-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-5-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

473997-0S-6 CAPLUS HE-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5,6-diethyl-4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

473997-15-8 CAPLUS 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5,6-diphenyl-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 7 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

S Ph N Ph

RN 473997-16-9 CAPLUS
CN IH-Pyrroloi(3.2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5,6-bis(2-methylpropyl)-4-oxo- (9CI) (CA INDEX NAME)

Bu-i

RN 473997-22-7 CAPLUS
CN Carbamic acid, [2-(7-cyano-5-ethyl-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrimidin-6-yl)ethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 473997-35-2 CAPLUS
CN IH-Pyrclo[3,2-d]pyrimidine-7-carbonitrile, 6-(2-aminoethyl)-5-ethyl-4,5-dihydro-4-oxo-(9C1) (CA INDEX NAME)

CH2-CH2-NH2

RN 473997-38-5 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-ethyl-4,5-dihydro-6-phenyl-4-

L16 ANSWER 7 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5,6-bis(2-methylpropyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN 473998-11-7 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(2-methylpropyl)4-thioxo-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

CN CF3

RN 47398-12-8 CAPLUS
CN 1H-Pyccolo[3,2-d]pycimidine-7-carbonitcile, 4,5-dihydro-5-(phenylmethyl)-4-thioxo-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

CF3

RN 473998-13-9 CAPLUS
CN 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-[2-(4-morpholinyl)ethyl]-4-thioxo-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

CN CF3 .

RN 473998-14-0 CAPLUS
CN HH-Pyrcoloi3,2-d]pyrimidine-7-carbonitrile, 6-ethyl-4,5-dihydro-4-oxo-(9C1) (CA INDEX NAME)

Page 108

L16 ANSWER 7 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) thioxo- (9CI) (CA INDEX NAME)

RN 473998-07-1 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-ethyl-4,5-dihydro-4-thioxo-(9CI) (CA INDEX NAME)

RN 473998-08-2 CAPLUS
CN 1H-Pycrologi3,2-d]pycimidine-7-carbonitrile, 6-ethyl-4,5-dihydro-5-phenyl-4thioxo- (9CI) (CA INDEX NAME)

RN 473998-09-3 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-ethyl-4,5-dihydro-5-[2-(4-morpholiny)]ethyl)-4-thioxo- (9CI) (CA INDEX NAME)

RN 473998-10-6 CAPLUS

L16 ANSWER 7 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 47398-15-1 CAPLUS
CN H-Pyrclo[3,2-d]pyrimidine-7-carbonitrile, 6-ethyl-4,5-dihydro-5-(2-phenylethyl)-4-thioxo- (9C1) (CA INDEX NAME)

RN 473998-16-2 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-acetyl-6-ethyl-4,5-dihydro-4-thioxo- [9CI) (CA INDEX NAME)

RN 473998-17-3 CAPLUS
CN SH-Pyrrolo[3,2-d]pyrimidine-5-carboxamide, 7-cyano-6-ethyl-1,4-dihydro-4-thioxo-(9CI). (CA INDEX NAME)

RN 473998-18-4 CAPLUS
SH-Pyrrolo[3,2-d]pyrimidine-5-acetamide, 7-cyano-6-ethyl-1,4-dihydro-4-thioxo-(9CI) (CA INDEX NAME)

L16 ANSWER 7 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

473998-19-5 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-ethyl-4,5-dihydro-5(methylsulfonyl)-4-thioxo- (9CI) (CA INDEX NAME)

473998-20-8 CAPLUS 5H-Pyrrolo[3,2-d]pyrimidine-5-methanesulfonamide, 7-cyano-6-ethyl-1,4-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

473998-21-9 CAPLUS SH-Pyrrolo[3,2-d]pyrimidine-5-carboxylic acid, 7-cyano-6-ethyl-1,4-dihydro-4-thioxo-, ethyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 7 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

473997-13-6 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-5,6-diphenyl-(GCI) (CA NDEX NAME)

The present invention provides 9-deazaguanine derivs. I  $\{X=0, S; Y=S, 0, NRI; RI=H, aliphatic, carbowy, acyl, etc.; R2=H, aliphatic, alkowy, thioalkowy, etc: R3=H, aliphatic, CN, halo, No, etc.; R4=H, aliphatic, amino, amino, amino, etc.], e.g., 4-thioxo-3,4,5,6,7,8-hexahydro-1,3,4e-triazzafluorene-9-carbonitrile. These compds. are inhibitors of protein kinase, particularly inhibitors of GSK-3 mammalian protein kinase. The invention also provides pharmaceutical compns. comprising the inhibitors of the invention and methods of using those compns. in the treatment and prevention of various disorders, such as diabetes and Alzheimer's disease. ICSO and KI detns. for inhibition of GSK-3 showed that many I have values below one µM and ICSO detns. for ROCX inhibition showed that certain I inhibit ROCK kinase. Although the methods of preparation are not claimed,$ 

39 example prepns. of I are included. L16 ANSWER 7 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473998-22-0 CAPLUS IH-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-cyclopropyl-6-ethyl-4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

473998-23-1 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5,6-bis(1-methylethyl)-4-thioxo- (9CI) (CA INDEX NAME)

473997-08-9P 473997-13-6P RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent) (preparation of 9-deazaguanine derivs. as inhibitors of GSK-3 and ROCK

kinase) 473997-08-9 CAPLUS HR-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5,6-diethyl-4,5-dihydro-4-oxo-(9CI) (CA INDEX NAME)

L16 ANSWER 8 OF 60 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2002:832804 CAPLUS DOCUMENT NUMBER: 137:337910
TITLE: Preparation of 6 ...

INVENTOR (S):

137:337910
Preparation of 9-deazaquaninė derivatives as inhibitors of GSK-3 and ROCK kinase
Cao, Jingrong: Choquette, Debbie: Davies, Robert: Forster, Cornelias Lauffer, David; Pierce, Albert: Tomlinson, Ronald: Wannamaker, Marion; Metz, Natalie Vertex Pharmaceuticals Incorporated, USA PCT Int. Appl., 106 pp.
CODEN: PINXD2
Patent

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Patent English 2

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PATENT NO.					KIND DATE					APPLICATION NO.						DATE			
	WO 2002085909				A1 20021031			WO 2002-US12395						20020419 <						
			AE,																	
												EE,								
												KG,								
		- 7	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	NZ,	OM,	PH,		
			PL,	PT,	RO,	RU,	SD,	SE;	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,		
			UA.	UG,	US,	UZ,	VN,	YU,	ZA.	ZM,	ZW									
		RV:	GH.	GM.	KE.	LS.	MV.	MZ.	SD.	SL.	SZ.	TZ.	UG.	ZM.	ZW.	AM.	AZ.	BY.		
												CY,								
												BF,								
												Dr,	ы,	Cr,	co,	CI,	Ciri,	un,		
									SN,											
			23052																	
			1598																	
	EP	1383	3771			A1		2004	0128		EP 2	002-	7340	12		2	0020	419	<	
		R:	AT,	BE,	CH,	'DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC.	PT.		
			IE.	SI.	LT.	LV.	FI.	RO.	MK.	CY.	AL.	TR								
	J.T.P.	2009	55047	30		T		2005	0217		JP 2	002-	5834	36		2	0020	419	<	
	MY	200	PA09	650		Ā		2005	0307		MX 2	003-	200	50			0031	020	è	
0010			PLN.									001-					0010			
PRIC	WII	AP	L PM .	INFO	• •							001-								
																r. 2	0010	420	·	
					•						wu 2	002-	US 12	222		w 2	0020	419	<	
OTHE	OTHER SOURCE(S): MARPAT 137:337910																			
ΙT	38	3161	-28-2	P 47	3997	-19-	2P 4	7399	7-36											

383161-28-29 473997-19-2P 473997-36-3P
RL: PAC (Pharmacological activity): RCT (Reactant): SPN (Synthetic preparation): TRU (Therapeutic use): BIOL (Biological study): PREP (Preparation): RACT (Reactant or reagent): USES (Uses) (drug candidate: preparation of 9-deazaguanine derivs. as inhibitors of GSK-3 and ROCK kinase)
383161-28-2 CAPLUS
1H-Pyrrolog(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-4-oxo-5-phenyl- (9CI) (CA INDEX NAME)

ANSWER 8 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 473997-19-2 CAPLUS Carbamic acid, {2-{7-cyano-5-ethyl-4,5-dihydro-4-oxo-lH-pyrrolo[3,2-d]pyrimidin-6-yl)ethyl}-, phenylmethyl ester (9CI) (CA INDEX NAME)

|| CH2-CH2-NH-C-O-CH2-Ph

473997-36-3 CAPLUS
1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-ethyl-4,5-dihydro-4-oxo-6-phenyl- (9CI) (CA INDEX NAME)

473997-03-4F 473997-05-6F 473997-15-8F 473997-16-9F 473997-22-7F 473997-35-2F 473997-35-2F 473997-35-2F 473997-07-1F 473998-08-2F 473998-09-2F 473998-10-6F 473998-11-7F 473998-11-6F 473998-11-0F 473998-15-1F 473998-16-2F 473998-17-3F 473998-17-3F 473998-17-3F 473998-17-3F 473998-27-1F 47399

#1/398-21-9F #1/398-22-0F #1/398-23-FF (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Uses) (drug candidate; preparation of 9-deazaguanine derivs, as inhibitors of GSK-3 and MoCK kinase) (drug GSK-3 and MoCK kinase) (

L16 ANSWER 8 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

$$\bigcap_{H} \bigcap_{N} \bigcap_{H_2-CH_2-NH-C-O-CH_2-Ph} \bigcap_{H_2-CH_2-Ph} \bigcap_{H_2-CH_2-Ph}$$

473997-35-2 CAPLUS 1H-Pyrrolo[3,2-4]pyrimidine-7-carbonitrile, 6-(2-aminoethyl)-5-ethyl-4,5-dthydro-4-oxo- (9CI) (CA INDEX NAME)

473997-38-5 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-ethyl-4,5-dihydro-6-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

473998-07-1 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-ethyl-4,5-dihydro-4-thiоко-(9C1) (CA INDEX NAME)

473998-08-2 CAPLUS HR-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-ethyl-4,5-dihydro-5-phenyl-4-thioxo- (9CI) (CA INDEX NAME)

L16 ANSWER 8 OF 60 CAPLUS COPYRIGHT 2007 ACS OR STN (Continued)

473997-05-6 CAPLUS IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5,6-diethyl-4,5-dihydro-4-thioxo- [9C1] (CA INDEX NAME)

473997-15-8 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-cárbonitríle, 4,5-dihydro-5,6-diphenyl-4-thíoxo- (9CI) (CA INDEX NAME)

473997-16-9 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5,6-bis(2-methylpropyl)-4-oxo- (9CI) (CA INDEX NAME)

473997-22-7 CAPLUS Carbamic acid. [2-(7-cyano-5-ethyl-4,5-dihydro-4-thioxo-1H-pyrrolo[3,2-d]pyrindin-6-yl)ethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 8 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473998-09-3 CAPLUS |H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 6-ethyl-4,5-dihydro-5-[2-(4-morpholinyl)ethyl]-4-thioxo- [9C1] (CA INDEX NAME)

473998-10-6 CAPLUS: HH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5,6-bis(2-methylpropyl)-4-thioxo- (9CI) (CA INDEX NAME)

473998-11-7 CAPLUS
1H-Pyrrolo(3,2-d)pyrimidine-7-carbonitrile, 4,5-dihydro-5-(2-methylpropyl)-4-thioxo-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

473998-12-8 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(phenylmethyl)-4-thioxo-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

L16 ANSWER 8 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473998-13-9 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5-(2-(4-morpholiny)lethyl]-4-thioxo-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

473998-14-0 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-ethyl-4,5-dihydro-4-oxo-(9CI). (CA INDEX NAME)

473998-15-1 CAPLUS |H-Pytrolo[3,2-d]pyrimidine-7-carbonitrile, 6-ethyl-4,5-dihydro-5-(2-phenylethyl-4-thioxo- (9CI) (CA INDEX NAME)

473998-16-2 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5-acetyl-6-ethyl-4,5-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

1.16 ANSWER 8 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473998-20-8 CAPLUS 5H-Pyrrolo[3,2-d]pyrimidine-5-methanesulfonamide, 7-cyano-6-ethyl-1,4-dihydro-4-thioxo- (9CI) (CA INDEX NAME)

473998-21-9 CAPLUS 5H-Pyrrolo[3,2-d]pyrimidine-5-carboxylic acid, 7-cyano-6-ethyl-1,4-dihydro-4-thioxo-, ethyl ester [9C1] (CA INDEX NAME)

473998-22-0 CAPLUS 1H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 5-cyclopropyl-6-ethyl-4,5-dthydro-4-thioxo- (SCI) (CA INDEX NAME)

RN 473998-23-1 CAPLUS

Page 111

L16 ANSWER 8 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

473998-17-3 CAPLUS 5H-Pyrrolo[3,2-d]pyrimidine-5-carboxamide, 7-cyano-6-ethyl-1,4-dihydro-4-thioxo- (9C1) (CA INDEX NAME)

473998-18-4 CAPLUS SH-Pyrcolo[3,2-d]pyrimidine-5-acetamide, 7-cyano-6-ethyl-1,4-dihydro-4-thioxo-(9CI) (CA INDEX NAME)

473998-19-5 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 6-ethyl-4,5-dihydro-5(methylsulfonyl)-4-thioxo- (9CI) (CA INDEX NAME)

ANSWER 8 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN · (Continued) IH-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-5,6-bis(1-methylethyl)-4-thioxo- (9CI) (CA INDEX NAME)

473997-08-9P 473997-13-6P
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent) (preparation of 9-deazaguanine derivs. as inhibitors of GSK-3 and ROCK kinase) 473997-08-9 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 5,6-diethyl-4,5-dihydro-4-oxo-(9CI) (CA INDEX NAME)

473997-13-6 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-4-oxo-5,6-diphenyl-[9CI] (CA INDEX NAME)

L16 ANSWER 8 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

The present invention provides 9-deazaguanine derivs. (shown as I) e.g. 4-thioxo-3, 4, 5, 6, 7, 8-hexahydro-1, 3, 4b-triazafluorene-9-carbonitrile) or a pharmaceutically acceptable derivative thereof, wherein X is 0 or 5; Y is

O- or -NR1-; and R2, R3, and R4 are as described in the specification. These compds. are inhibitors of protein kinase, particularly inhibitors of GSK-3 mammalian protein kinase. The invention also provides pharmaceutical compns. comprising the inhibitors of the invention and methods of using those compns. in the treatment and prevention of various disorders, such as diabetes and Alzheimer's disease. ICSO and Ki detns. for inhibition of GSK-3 showed that many I have values below one µM and ICSO detns. for ROCK inhibition showed that certain I inhibit ROCK kinase. Alzhough the methods of preparation are not claimed, 39 example prepns. of I are included.

are included. REFERENCE COUNT:

THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 9 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L16 ANSWER 9 OF 60 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2001:436287 CAPLUS DOCUMENT NUMBER: 135:242200 2001:436287
2001:436287
2007:2289Ler Oyclization in the synthesis of 3-amino-4-cyanopyrrole derivatives Ryndina, S. A.; Kadushkin, A. V.; Solov'eva, N. P.; Granik, V. G. Research Institute for Intermediates and Dyestuffs, State Scientific Center of the Russian Federation, Moscow, 103787, Russia Chemistry of Heterocyclic Compounds (New York, NY, United States) (Translation of Khimiya Geterotsithlicheskik Soedinenii) (2000), 16(12), 1409-1420, CODEN: CHCCAL; ISSN: 0009-3122 Consultants Bureau Journal English CASRACT 135:242200 TITLE: AUTHOR (S): CORPORATE SOURCE: SOURCE:

CODEN: CHCCAL; ISSN: 0009-3122

PUBLISHER: Consultants Bureau
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(s): CASREACT 135:242200

IT 302802-20-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(Torp-Ziegler cyclization of β-enamino nitriles with alkyl halides to aminocyanopyrroles)
RN 302802-20-6 CAPLUS

CN 3H-Pyrcolo[3,2-d]pyrimidine-7-carbonitrile, 4,5-dihydro-6-methyl-4-oxo-5-phenyl-3-(phenylmethyl) - (9CI) (CA INDEX NAME)

GΙ

AB Polyfunctional derivs of 3-aminopyrrole, I (R = Me, PhCh2, Ph, 4-BrC6H4, 4-ClC6H4, Rl = PhCh, MeO2C, 4-BrC6H4CO, EtO2C), have been synthesized from several substituted B-enamino nirciles (NC)2C:CHeNHR using Torp-Ziegler cyclization with alkyl halides. These compds are starting materials for further conversions, particularly for the synthesis of pyrrolo[3,2-d] - and pyrrolo[3,4-d]pyrimidines.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 10 OF 60 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2001:279860 CAPLUS DOCUMENT NUMBER: 135:62958

TITLE:

135:02938
The Chemical Development of CI-972 and CI-1000: A Continuous Nitration, A MgCIZ/Et3N-Mediated C-Alkylation of a Chloronitropyrimidine, A Catalytic Protodediazotization of a Diazonium Salt, and an Air

Protodediazotization of a Diazonium Salt, and an Air Oxidation of an Amin Devidson, James G.; Dozeman, Gary J.; Fiore, Philip J.; Giri, Punam: Kelly, Margaret E.; Fuls, Timothy P.; Seamans, Ronald E. Flizer Global Research and Development Holland Laboratories, Holland, MI, 49424, USA Organic Process Research & Development (2001), 5(3), 216-225 CODEN: ORPHEK: ISSN: 1083-6160 American Chemical Society Journal AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

PUBLISHER:

DOCUMENT TYPE: Journal

LANGUAGE: English

115787-68-3P. CI-972

115787-68-3P, CI-972
RL: IMF (Industrial manufacture): PREP (Preparation)
(chemical development of CI-972 and CI-1000 (PNP inhibitors): continuous
nitration and subsequent MgCl2/EE3N-mediated C-alkylation of
chloronitropyrimidine, catalytic protodediazotization of diazonium
salt, and air oxidation of amine)
115787-68-3 CAPLUS
4H-Pyrcolo(3, 2-d)pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3thienylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

• HCl

163217-79-6P RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (chemical development of CI-972 and CI-1000 (PNP inhibitors): continuous nitration and subsequent MgCI2/Et3N-mediated C-alkylation of chloronitropyrimidine, catalytic protodediazotization of diazonium salt, and air oxidation of amine) 163217-79-6 CAPLUS IH-Pytrolo[3, 2-d]pyrimidine-6-diazonium, 2-amino-4,5-dihydro-4-oxo-7-(3-thienylmethyl)-, chloride (9CI) (CA INDEX NAME)

L16 ANSWER 10 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

• c1-

Efficient, large-scale processes were developed for the preparation of the potent PNF inhibitors: 2.6-diamino-3.5-dihydro-7-(3-thienylmethyl)-4H-pyrcolo[3.2-d]pyrimidin-4-one hydrochloride monohydrate and 2-amino-3.5-dihydro-7-(3-thienylmeth-yl)-4H-pyrcolo[3.2-d]pyrimidin-4-one hydrochloride monohydrate ([]). We report ([]) a safe, continuous nitration process for the preparation of 2-amino-6-chloro-5-nitro-4-pyrimidinol and

stable diisopropylamine salt, (2) the first MgCl2/Et3N-mediated
C-alkylation of a chloronitropyrimidine, (3) a rare catalytic
protodediazotization of 2-amino-4-oxo-7-thiophen-3-ylmethyl-4,5-dihydro-3Hpyrrolo[3,2-d]pyrimidine-6-diazonium chloride, (4) a single-step process
to prepare I directly from 2-amino-6-hydroxy-5-nitro-a-(3thienylmethyl)-4-pyrimidineacetonitrile using a sponge nickel-catalyzed
reduction, and (5) a method to convert the over-reduction byproduct:
2,5-diamino-6-(1-aminomethyl-2-thiophen-3-yl-ethyl)-pyrimidin-4-ol into I
using air oxidation
REFERENCE COUNT:
32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE DE SCHMAT

THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 11 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

AB Values of inhibition consts., Ki, and concest required for 50% inhibition, IC50, for a collection of structurally diverse competitive inhibitors of calf spleen purine nucleoside phosphorylase have been determined employing inosine as substrate. These values have been employed to create predictive quant. structure-activity relationships (GSAR) which link structure to values of Ki and IC50. These GSAR models have substantial power to predict values and the associated uncertainties for Ki and IC50 for unknown, structurally diverse inhibitors of purine nucleoside phosphorylase.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS REFORD ALL CITATIONS AVAILABLE FOR THE FROMET

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 11 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN SSION NUMBER: 2001:48250 CAPLUS MENT NUMBER: 134:246867

ACCESSION NUMBER: DOCUMENT NUMBER:

ACCESSION NUMBER: 2001:48250 CAPLUS
DOCUMENT NUMBER: 134:246867
TITLE: Structure-activity relationships for a collection of structurally diverse inhibitors of purine nucleoside phosphorylase
AUTHOR(5): Andricopulo, Adriano D.; Yunes, Rosendo A.
CORPORATE SOURCE: College of Pharmacy, University of Michigan, Ann Arbor, MI, 48109, USA
SOURCE: Chemical 4 Pharmaceutical Bulletin (2001), 49(1), 10-17
CODEN: CPETAL; ISSN: 0009-2363
PUBLISHER: Pharmaceutical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: English
T1 115812-51-6 139367-73-0 192653-69-3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study); USES (USes)
(SAR of structurally diverse inhibitors of purine nucleoside

phosphorylase)
115812-51-6 Caplus
4H-Pyrcolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(2-thienylmethyl) - (9CI) (CA INDEX NAME)

139367-73-0 CAPLUS RN CN 4H-Pyrrolo(3,2-d)pyrimidin-4-one, 2,6-diamino-7-(cyclohexylmethyl)-1,5-dihydro- (9CI) (CA INDEX NAME)

192653-69-3 CAPLUS 4H-Pyrrolo[3,2-d]pyrimidin-4-one, 2-amino-1,5-dihydro-6-methyl-7-(phenylmethyl)- (9E1) (CA INDEX NAME)

L16 ANSWER 12 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2000:798997 CAPLUS

DOCUMENT NUMBER: 134:115913

134:115913
New syntheses of 2-alkylthio-4-oxo-3,4dihydroquinazolines, 2-alkylthioquinazolines, as well
as their hetero analogues
Gruner, Margit; Rehwald, Matthias; Eckert, Katrin;
Gewald, Karl

AUTHOR(S):

CORPORATE SOURCE: .

Gewald, Karl
Institut of Organic Chemistry, Technical University
Dresden, Dresden, D-01062, Germany
Heterocycles (2000), 53(11), 2363-2377
CODEN: HTCYAN; ISSN: 0385-5414
Japan Institute of Heterocyclic Chemistry
Journal

SOURCE:

PUBLI SHER: DOCUMENT TYPE:

LANGUAGE:

English CASREACT 134:115913 OTHER SOURCE(S):

R SOURCE(5): CASREACT 134:115913
321434-40-69
RL: SPN (Synthetic preparation): PREP (Preparation)
(preparation of 2-alkylthio-4-oxo-3,4-dihydroquinazolines,
2-alkylthioquinazolines, and their hetero analogs)
321434-40-6 CAPUS
Acetic acid, [[7-cyano-4,5-dihydro-6-(methylthio)-4-oxo-1H-pyrrolo[3,2-d]pyrimidin-2-yl]thio]-, ethyl ester (9CI) (CA INDEX NAME)

AB N-Chloroacetylanthranilic acid Et ester reacts with potassium thiocyanate in the presence of alc. to give the (4-oxo-3,4-dihydroquinazolin-2-ylsulfanyl)acetic acid ester. In the presence of water or amines the free acetic acid derivative or the acetamide derivs, are obtained.

2-Amino-4-oxo-3,4-dihydroquinazolines arise if vigorous reaction conditions are employed. Analogously, N-chloroacetyl derivs. of 5-membered heterocycles with enaminocarbonyl structure react with potassium thiocyanate to yield thieno[2,3-d]-, thieno[3,2-d]-, imidazo[4,5-d]-, pyrrolo[3,2-d]-, and thiazolo[4,5-d]pyrimidines.

Quinazolines are formed by the reaction of 2-chloroacetylaminoacetophenone and 2-chloroacetylaminobenzophenone with potassium thiocyanate and subsequent treatment of the intermediates with amines.

REFERENCE COUNT: 16 THERE ARE 16 CITEO REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 13 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:358538 CAPLUS

131153425

Structure-Activity Relationships for a Class of Inhibitors of Purine Nucleoside Phosphorylage

AUTHOR(S): Frazer, Masterson, Lori: Andricopulo, Adriano D.: Cheng, Jianming; Riley, Brad; Hakimi, Ryan: Frazer, Jack W.; Cordes, Eugene H.

CORPORATE SOURCE: College of Pharmacy and Department of Chemistry, University of Mitchigan, Ann Arbor, MI, 48109, USA Journal of Medicinal Chemistry (1999), 42(13), 2422-2431 CODEN: JMCMAR: ISSN: 0022-2625

PUBLISHER: AUTHOR AND A Medician Society

PUBLISHER: American Chemical Society

DOCUMENT TYPE: LANGUAGE:

JAGE: English 139367-73-0 192653-69-3

139367-73-0 192653-69-3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (discovery of purine nucleoside phosphorylase inhibitors using QSAR) 139367-73-0 CAPLUS
4H-Pyrrclo[3,2-d]pyrimidin-4-one, 2,6-diamino-7-(cyclohexylmethyl)-1,5-dihydro- (9CI) (CA INDEX NAME)

192653-69-3 CAPLUS
4H-Pyrcolo[3,2-d]pyrimidin-4-one, 2-amino-1,5-dihydro-6-methyl-7-(phenylmethyl)- (9C1) (CA INDEX NAME)

Values of inhibition consts., Ki, for a family of structurally related, competitive inhibitors of calf spleen purine nucleoside phosphorylase (PMP) have been determined employing both inosine as substrate and a manual assay and 2-amino-6-mercapto-7-methylpurine ribonucleoside (MSSG) as substrate and a robot-based enzyme kinetics facility. Several of the values determined robotically were confirmed employing the same substrate a

manual assay. Surprisingly, for many of the inhibitors examined, values of

L16 ANSWER 14 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1998:282933 CAPLUS DOCUMENT NUMBER: 128:321614

DOCUMENT NUMBER:

AUTHOR(S): CORPORATE SOURCE:

128:321614
Studies on Pyrimidine-Annelated Heterocycles:
Synthesis of Pyrcrolo[3,2-d]pyrimidines by Amine Oxide
Rearrangement
Majumdar, K. C.: Das, U.: Jana, N. K.
Department of Chemistry, University of Kalyani,
Kalyani, 741235, India
Journal of Organic Chemistry (1998), 63(11),
3550-3553
CODEN: JOCKAH: ISSN: 0022-3263

SOURCE:

CODEN: JOCEAH: ISSN: 0022-3263 American Chemical Society

PUBLISHER: DOCUMENT TYPE: LANGUAGE:

OTHER SOURCE(S):

ISHER: American Chemical Society
MENT TYPE: Journal
UAGE: English
R SOUNCE(S): CASREACT 128:321614
R SOUNCE(S): CASREACT 128:321614
R SOUNCE(S): PROPERTY SOURCE SO

207112-28-5 CAPLUS
Benzoic acid, 3-chloro-, [6-[(4-chlorophenoxy)methyl]-5-ethyl-2,3,4,5-tetrahydro-1,3-dimethyl-2,4-dioxo-lH-pycrolo[3,2-d]pyrimidin-7-yl]methylester (9C1) (CA INDEX NAME)

207112-29-6 CAPLUS Benzoic acid, 3-chloro-, [5-ethyl-2,3,4,5-tetrahydro-1,3-dimethyl-2,4-

Page 114

L16 ANSWER 13 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Ki detd. with MESG as substrate are smaller than those obtained employing inosine as substrate by a factor that varies from less than 2 to 10.

Values of concers, required for 501 inhibitors or less than 2 to 10.

Values of concers, required for 501 inhibitors omploying inosine as substrate.

Values of IC501no and those for Kilno and Kimesg for subsets of the inhibitors have been employed as training sets to create quant structure-activity relationships (OSAR) which have substantial power to predict values of IC50 and Ki for inhibitors outside the training set. These OSAR models should be useful in guiding future medicinal chem efforts designed to discover inhibitors of PNP having increased potency.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 14 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) dioxo-6-(phenoxymethyl)-1H-pyrrolo[3,2-d]pyrimidin-7-yl]methyl ester (9CI) (CA INDEX NAME) L16

$$\begin{array}{c|c} \text{Me} & \text{O} & \text{Et} \\ \hline \text{O} & \text{I} & \text{CH}_2 - \text{OPh} \\ \hline \text{O} & \text{CH}_2 - \text{O} - \text{C} \\ \hline \text{Me} & \text{CH}_2 - \text{O} - \text{C} \\ \hline \end{array}$$

207112-30-9 CAPLUS Benzoic acid, 3-chloro-, [5-ethyl-2,3,4,5-tetrahydro-6-[(4-methoxyphenoxy)methyl]-1,3-dimethyl-2,4-dioxo-lH-pyrrolo[3,2-d]pyrimidin-7-yl]methyl ester (9CI) (CA INDEX NAME)

207112-31-0 CAPLUS
Benzoic acid, 3-chloro-, [5-ethyl-2,3,4,5-tetrahydro-1,3-dimethyl-6-[{4-methylhenoxy|methyl]-2,4-dioxo-1H-pyrcolo[3,2-d]pyrimidin-7-yl]methylester (9CI) (CA INDEX NAME)

207112-32-1 CAPLUS
Benzoic acid, 3-chloro-, {5-ethyl-2,3,4,5-tetrahydro-1,3-dimethyl-6-{(2-methylphenoxy)methyl)-2,4-dioxo-lH-pyrrolo{3,2-d}pyrimidin-7-yl}methyl
ester (9CI) (CA INDEX NAME)

L16 ANSWER 14 OF 60 CAPLUS COPYRIGHT 2007 ACS On STN

207112-33-2P 207112-34-3P 207112-35-4P 207112-36-5P 207112-37-6P 207112-36-7P 207112-36-P 207112-38-PR (SPN (Synthetic preparation) (preparation of pyrrolo[3,2-d]pyrimidines by amine oxide rearrangement) 207112-33-2 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-2,4(3H,5H)-dione, 6-{(2-chlorophenoxy)methyl]-5-ethyl-7-(methoxymethyl)-1,3-dimethyl- (9CI) (CA INDEX NAME)

207112-34-3 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-2,4(3H,5H)-dione, 6-[(4-chlorophenoxy)methyl]-5-ethyl-7-(methoxymethyl)-1,3-dimethyl- (9CI) (CA INDEX NAME)

207112-35-4 CAPLUS IM-Pyrrolo(3,2-d|pyrimidine-2,4(3H,5H)-dione, 5-ethyl-7-(methoxymethyl)-1,3-dimethyl-6-(phenoxymethyl)- (9CI) (CA INDEX NAME)

L16 ANSWER 14 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

AB A number of pyrrolo[3,2-d]pyrimidine derivs, were synthesized in 90-951 yields from the corresponding 5-(N-[4-(aryloxy)but-2-ynyl]-N-ethylamino]-1,3-dimethyluracils by simple treatment with 1 equiv of m-chloroperoxybenzoic acid in dichloromethane at 0-5 °C for 12-15 h. The resulting m-chlorobenzoates were easily converted to methoxy. derivs, in 92-941 yields when refluxed in methanol for 20-22 h.

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 14 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

207112-36-5 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-2,4(3H,5H)-dione,5-ethyl-7-(methoxymethyl)-6[(4-methoxyhenoxy)methyl]-1,3-dimethyl- (9C1) (CA INDEX NAME)

207112-37-6 CAPLUS
IR-Pycrol(3,2-d)pyrimidine-2,4(3H,5H)-dione, S-ethyl-7-(methoxymethyl)1,3-dimethyl-6-[(4-methylphenoxy)methyl)- (9CI) (CA INDEX NAME)

$$\begin{picture}(20,0) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){100$$

207112-38-7 CAPLUS
1H-Pyrcol(3,2-6) pyrimidine-2,4(3H,5H)-dione,5-ethyl-7-(methoxymethyl)-1,3-dimethyl-6-[(2-methylphenoxy)methyl)-(9CI) (CA INDEX NAME)

L16 ANSWER 15 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1998:193124 CAPLUS DOCUMENT NUMBER: 128:230342

DOCUMENT NUMBER:

AUTHOR (S):

128:23034on of 6-amino-2,4-dimethoxy-7,7-dibenzyl-7HPreparation of 6-amino-2,4-dimethoxy-7,7-dibenzyl-7Hpyrrolo[3,2-d]pyrimidine and its reactions
Otmar, Micoslavy Masojidkova, Milena; Budesinsky,
Milos; Holy, Antonin
Institute Organic Chem. and Biochem., Academy Sciences
Czech Republic, Prague, 166 10, Czech.
Conference of Organic Chemists on Advances in Organic
Chemistry, 22nd, Casta-Papiernicka, Slovakia, June
11-13, 1997 (1997), 109-110. Editor(s):
Fisera, Lubor; Krutosikova, Alzbeta; Benckova, Maria.
Vydavatelstvo STU: Bratislava, Slovakia.
Conference
English CORPORATE SOURCE:

SOURCE:

DOCUMENT TYPE:

UAGE: English
204714-48-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and reactions of aminodimethoxydibenzylpyrrolopyrimidine)
204714-48-7 CAPLUS
7H-Pyrrolo[3], 2-d]pyrimidin-6-amine, 2,4-dimethoxy-7,7-bis(phenylmethyl)(9CI) (CA INDEX NAME)

AB A conference REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 16 OF 60
ACCESSION NUMBER:
DOCUMENT NUMBER:
1171LE:
Catalytic hydrogenation causes C-benzyl bond cleavage in 6-amino-7, 7-dibenzyl-2, 4-dimethoxy-7H-pyrrolo[3,2-d]pyrimidine: an example indicating novel route to 6-amino-7-benzyl-5H-pyrrolo[3,2-d]pyrimidines and related compounds

AUTHOR(S):
Otmar, Micoslav: Masojidkova, Milena: Budesinsky, Milos; Holy, Antonin
Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, Prague, 166
10, Czech Rep.

SOURCE:
Tetrahedron (1998), 54(12), 2931-2940
CODEN: TETRAB ISSN: 0040-4020
Elsevier Science Ltd.
JOURIAL LANGUAGE:
CASHEACT 128:244008
T1 204714-48-7 204860-65-9P 204860-67-1P
204806-59-3P 204860-61-7P 204860-62-8P
RL: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or cagent)
(hydrogenolysis of a C-benzyl group in preparation of pyrrolopyrimidinamines)
RN 204714-48-7 CAPIUS;
CN 7H-Pyrrolo[3,2-d]pyrimidin-6-amine, 2,4-dimethoxy-7,7-bis(phenylmethyl)(9CI) (CA INDEX NAME)

204860-55-9 CAPLUS Acetamide, N-[2,4-dimethoxy-7,7-bis(phenylmethyl)-7H-pyrrolo[3,2-d]pyrimidin-6-yl]- (9CI) (CA INDEX NAME) RN CN

204860-57-1 CAPLUS
5H-Pyrcolo[3,2-d]pyrimidin-6-amine, 2,4-dimethoxy-7-(phenylmethyl)- (9CI)
(CA INDEX NAME) .

ANSWER 16 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 204860-64-0 CAPLUS 6H-Pyrcolo[3,2-d]pyrimidin-6-one, 5,7-dihydro-7-hydroxy-2,4-dimethoxy-7-(phenylmethyl)- (9C1) (CA INDEX NAME)

Benzylpyrrolo[3,2-d]pyrimidines I and II were prepared by reductive cyclization of the corresponding 6-(1-cyanoalkyI)-5-nitropyrimidines. Catalytic hydrogenation of II causes a C-C bond cleavage between carbon C-7 and one of the geminal benzyl groups, which yields 6-amino-7-benzyl-2,4-dimethoxy-5H-pyrclo[3,2-d]pyrimidine which spontaneously oxidized in air to benzylpyrclo[3,2-d]pyrimidine III. RENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT REFERENCE COUNT:

L16 ANSWER 16 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN CN

204860-59-3 CAPLUS 7H-Pyrcolo[3,2-d]pyrimidin-7-ol, 6-amino-2,4-dimethoxy-7-(phenylmethyl)-(9CI) (CA INDEX NAME)

204860-61-7 CAPLUS
Acetamide, N-[2,4-dimethoxy-7-(phenylmethyl)-5H-pyccolo[3,2-d]pycimidin-6-yl]- (9CI) (CA INDEX NAME)

204860-62-8 CAPLUS Acctande, N-[-(acctyloxy)-2.4-dimethoxy-7-(phenylmethyl)-7H-pycrolo[3,2-d)pycindin-6- $\dot{y}$ l] (CA INDEX NAME)

204860-64-0P RL: SPN (Synthetic preparation); PREP (Preparation) (hydrogenolysis of a C-benzyl group in preparation of pyrrolopyrimidinamines)

L16 ANSWER 17 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:511733 CAPLUS
DOCUMENT NUMBER: 127:121751
Process for the preparation of 9-deazaguanine derivatives from enamines
Elliott, Arthur J.; Walsh, David A.; Morris, Philip E.
SOURCE: PATENT ASSIGNEE(S): Biocryst Pharmaceuticals, Inc., USA; Elliott, Arthur J.; Walsh, David A.; Morris, Philip E.
PCT Int. Appl., 77 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PATENT NO.				KIND DATE			APPLICATION NO.						DATE					
	WO 9721653			A1 19970619			1	WO 1996-US19556						19961212 <					
		w:	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	Cυ,	CZ,	DE,	
								GE,											
			LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	
			RO.	RU,	SD,	SE,	SG,	SI,	SK,	TJ,	TM,	TR.	TT,	UA,	UG,	US,	UZ,	W	
		RW:	KE.	LS,	MW,	SD,	SZ,	UG,	AT,	BE,	CH.	DE.	DK,	ES,	FI.	FR,	GB,	GR,	
			IE.	IT.	LU,	MC,	NL.	PT.	SE.	BF.	BJ,	CF.	CG,	CI.	CM.	GA.	GN,	ML.	
			MR.	NE.	SN.	TD.	TG						-						
	us	5650	511			A		1997 1997 1997 1999	0722		US 1	995-	5707	96		11	9951	212	<
	CA	2273	983			A1		1997	0619		CA 1	996-	2273	983		1	9961	212	<
	AU	9711	500			A		1997	0703		AU 1	997-	1150	0		1	9961	212	<
	CN	1239	472	•		A		1999	1222		CN 1	996-	1805	35		11	9961	212	é
	EP	9700	129			A1		2000	0112		EP 1	996-	9429	33		1	9961	212	ć
	٠.							ES,											
		•••						RO		05,	٠,,,	,	,	20,	,	52,	,	,	
	MZ	3350	40	JI,	ы.,	٠,,		2000	1720		M7 7	006-	3350	40		1.	0061	212	
	TD	2001	5214	0.3		÷		2000 2001 2000	1106		TD 1	990-	5221	43		1	0061	212	>
	O.L	2001	0070	43		•		2001	1100		N 1	000	2052	60		2.	0000	611	>
PRIO	N.K	2000	105/5	4 /		-		2000	0925		VK T	999-	1032	00		A 1	2220	212	
PRIO	KIII	API	ru.	INFO	. :														
																A 1	9961	212	<
	OTHER SOURCE(S): CASREACT 127:121751; MARPAT 127:121751																		
ΙT	IT 192653-69-3P																		
RL: SPN (Synthetic preparation): PREP (Preparation)																			

(process for the preparation of 9-deazaguanine derivs. from enamines) 192653-69-3 CAPLUS

4H-Pyrrolo[3,2-d]pyrimidin-4-one, 2-amino-1,5-dihydro-6-methyl-7-(phenylmethyl)- (9CI) (CA INDEX NAME)

GΙ

L16 ANSWER 17 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

The title compds. [I: Q = H, alkyl, CF3, Ph; X = (un)substituted aryl, heterocyclic or alicyclic ring substituent; Y = H, alkyl, CONH2, COZH, etc.] are prepared by the reaction of a ketone or aldehyde QCOCH(CHZX)CN with a dialkylaminomalonate to produce an enamine. Which is cyclized with a base to produce a pyrrole (II: R2 = CI-4 alkyl), II is reacted with a urea R3OZCN:(CZ)MHCOZR3 (R3 = CI-4 alkyl); Z = alkylthio, :S, SH, Cl, alkoxy; the N:C double bond is optional) to form a quanidino derivative(III) or II

the M:C GOUDIS BORG IS OPTIONAL) to form a guantitho Gerryative(II) Of II is reacted with a carbanimidoic acid RIOCON:C(RI1)NHCORIO [RIO = (un)substituted Phr RII = alkoxy) to form a protected guanidino derivative (IV); [II or IV are then cyclized in the presence of CF3CO2H or alkoxides or alkalis or alkalise earth metal hydroxides, Collowed by acid neutralization to produce I. Thus, Ne 3-amino-4-[2-cyano-1-(3-pyridy1)ethy1]-IH-pyrrole-2-carboxylate was reacted with N,N'-bis(carbomethoxy)-5-methylisothiourea and EIN in MeCN, mercuric chloride added, the solvent evaporated, the residue extracted with MeOH, the extract reacted with NaOMe in MeOH, and the extracted with MeOH, the extract reacted with NaOMe in MeOH, and the reaction mixture neutralized with AcOH in H2O, producing 3-(3-pyridy1)-3-(2-amino-4-oxo-3H,5H-pyrrolo[3,2-d]pyrimidiny1) propanenitrile hemihydrate [m.p. 297-299\* (decomposition)] in 27.5t yield.

ANSWER 18 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
7H-Pycrolo(3,2-d|pyrimidin-6-amine, 2,4-dimethoxy-7,7-dipropyl- (9CI) (CA INDEX NAME)

186261-23-4 CAPLUS
7H-Pyrrolo[3,2-d]pyrimidin-6-amine, 2,4-dimethoxy-7,7-di-2-propenyl- (9CI)
(CA INDEX NAME)

186261-32-5 CAPLUS Acetamide, N-(2,4-dimethoxy-7,7-dipropyl-7H-pyrrolo[3,2-d]pyrimidin-6-yl)-(9C1) (CA INDEX NAME)

186261-33-6 CAPLUS Acetamide, N-acetyl-N-(2,4-dimethoxy-7,7-dipropyl-7H-pyrrolo[3,2-d]pyrimidin-6-yl)- (9CI) (CA INDEX NAME)

Reductive cyclization of 6-(1-cyanoalky1)-5-nitropyrimidines gave 7-alky1-5H-pyrcolo(3,2-d)pyrimidines. The presence of two alky1 substituents at the cyanomethy1 group resulted in the formation o 6-amino-7,7-dialky1-7H-pyrrolo(3,2-d)pyrimidines. By this method

Page 117

L16 ANSWER 18 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:8197 CAPLUS

DOCUMENT NUMBER: 126:117954

Reductive cyclization of 6-cyanomethyl-5nitropyrimidines - an efficient route to
7-alkyl-5H-pycrolo[3, 2-d]pyrimidines and
6-amino-7,7-dialkyl-7H-pycrolo[3, 2-d]pyrimidines.
Utilization in the synthesis of 9-deaza analogs of
OHPA

AUTHOR(S):

DHPA
Otmar, Miroslav: Masojidkova, Milena: Holy, Antonin
Inst. Organic Chemistry, Academy Sciences, Prague, 166
10, Czech Rep.
Tetrahedron (1997), 53(1), 391-400
CODEN: TETRAB: ISSN: 0040-4020
Elseviel

SOURCE:

PUBLI SHER:

186261-30-3 CAPLUS Acetamide, N-acetyl-N-(2,4-dimethoxy-7,7-di-2-propenyl-7H-pyrrolo[3,2-d]pyrimidin-6-yl)- (GCI INDEX NAME)

183314-15-0P 186261-23-4P 186261-32-5P 186261-33-6P ΙT

RE: SPN (Synthetic preparation); PREP (Preparation) (preparation of pyrrolopyrimidines via reductive cyclization of nitropyrimidineacetonitriles)
183314-15-0 CAPLUS

ANSWER 18 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
7-(2,3-dihydroxypropyl)-2,4-dimethoxy-5H-pytrolo[3,2-d]pyt/midine was
prepd. as an intermediate for the prepn. of 9-deaza analogs of DHPA [i.e.,
(5)-9-(2,3-dihydroxypropyl)adenine] and related compds.
RENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 19 OF 60
ACCESSION NUMBER:
DOCUMENT NUMBER:
1996:600856 CAPLUS
125:329282
Two synthetic approaches to 9-deaza analogs of 9-(2,3-dihydroxypropy)) adenine (DHPA)
Otnar, Hiroslav; Hasojidkova, Molena; Holy, Antonin
Otnar, Hiroslav; Hasojidkova, Molena; Holy, Antonin
Source:
Collection of Czechoslovak Chemical Communications (1996), 61(Spec. Isaue), 549-551
CODEN: CCCCAK; ISSN: 0010-0765
Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic
LANGUAGE:
LANGUAG

Academy of Sciences of the Czech Republic

DOCUMENT TYPE: Journal
LANGUAGE: English

IT 183314-15-0P

RL: SPN (Synthetic preparation): PREP (Preparation)

(two synthetic approaches to 9-deaza analogs of 9-(2,3dihydroxypropyl) adenine (DHPA):

RN 183314-15-0 CAPLUS

CN 7H-Pyrcolo[3,2-d]pyrimidin-6-amine, 2,4-dimethoxy-7,7-dipropyl- (9CI) (CA
INDEX NAME)

Two approaches to prepare 7-(2,3-dihydroxypropyl)-2,4-dimethoxy-5H-pycrolo[3,2-d]pyrimidine are described. The first approach starts from 6-cyanomethyl-2,4-dimethoxy-5-nitropyrimidine which is substituted on its active methylene with 2,3-dihydroxypropyl group: the hydrogenation of this compound results in simultaneous reduction of the nitro group and condensed pyrrole ring-closure. The second approach to this DHPA analog consists in addition of alkaline salt of 2,4-dimethoxy-5H-pyrrolo[3,2-d]pyrimidine on [RS]-2,3-0-isporpoylideneglyceraldehyde followed by reductive removal of the hydroxy group.

L16 ANSWER 20 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

182242-62-2 CAPLUS 4H-Pyrrolo[3,2-4]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3-pyridiny|Bethyl)- (9CI) (CA INDEX NAME)

GI

An efficient synthesis of 9-deazaguanines I (Ar = Ph, 3-furanyl, 3-pycidinyl) by reductive cyclodeamination of 5-nitro-6-(cyanomethyl)pycindine deciva. II under acidic conditions is described.

L16 ANSWER 20 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1996:519891 CAPLUS DOCUMENT NUMBER: 125:275781 Synthesis of

125:275781
Synthesis of pyrrolo[3,2-d]pyrimidines
(9-deazaguanines) by reductive cyclodeamination

(9-deazaguanines) by reductive cyclodeamination reactions Elliott, Arthur J.; Kotian, Pravin L.; Montgomery, John A.; Walsh, David A. BioCcyst Pharm. Inc., Birmingham, AL, 35244, USA Tetrahedron Letters (1996), 37(33), 5829-5830 AUTHOR (5):

CORPORATE SOURCE:

SOURCE:

CODEN: TELEAY; ISSN: 0040-4039 Elsevier

PUBLISHER:

DOCUMENT TYPE: LANGUAGE:

MENT TYPE: Journal
UAGE: English
115787-58-1P 115787-59-2P 182242-61-1P
182242-62-2P
RL: SPN (Synthetic preparation): PREP (Preparation)
(preparation of deazaguanines by reductive cyclodeamination of nitro(cyanomethyl)pyrimidinones)
115787-58-1 CAPLUS
4H-Pyrcolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(phenylmethyl)-(9CI) (CA INDEX NAME)

115787-59-2 CAPLUS 4H-Pycrolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3-thienylmethyl)- (9CI) (CA INDEX NAME)

RN CN

182242-61-1 CAPLUS 4H-Pyrcolo[3,2-d]pyrimidin-4-one, 2,6-diamino-7-(3-furanylmethyl)-1,5-dihydro- (9C1) (CA INDEX NAME)

L16 ANSWER 21 OF 60 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1995:749220 CAPLUS DOCUMENT NUMBER: 123:217709

TITLE: Structure-based design of inhibitors of purine

nucleoside phosphorylase Babu, Y. Sudhakar: Ealick, Steven E.; Bugg, Charles E.: Erion, Mark D.; Guida, Wayen C.; Montgomery, John A.: Secrist, John A., III AUTHOR (5):

BioCryst Pharmaceuticals, Inc., Birmingham, AL, 35244, CORPORATE SOURCE:

USA
Acta Crystallographica, Section D: Biological
Crystallography (1995), D51(4), 529-35
CODEN: ABCREG: ISSN: 0907-4449
Munksgaard
Journal SOURCE:

PUBLISHER:

JOURNAL TYPE: South Annual Control of the Control o

(Structure-answer design of imministrate of patrice increasing phosphorylase)
115787-58-1 CAPLUS
4H-Pyrrolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(phenylmethyl)-(9CI) (CA INDEX NAME)

115787-59-2 CAPLUS 4H-Pyrcolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3-thienylmethyl)- (9CI) (CA INDEX NAME)

139367-73-0 CAPLUS 4H-Pyrrolo[3,2-d]pyrimidin-4-one, 2,6-diamino-7-(cyclohexylmethyl)-1,5-dihydro- (9CI) (CA INDEX NAME)

L16 ANSWER 21 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

Inhibitors of purine nucleoside phosphorylase may have therapeutic value in the treatment of T-cell proliferative diseases such as T-cell leukemia, in the suppression of host-vs.-graft response in organ transplants, and in the treatment of T-cell-mediated autoimmune diseases. Competitive inhibitors of this enzyme have been designed using the three-dimensional structure of the enzyme determined by x-ray crystallog. This approach has resulted in the synthesis of the most potent and membrane-permeable inhibitors of purine nucleoside phosphorylase reported so far.

L16 ANSWER 22 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

(Continued)

• c1

163217-78-5, 2,6-Diamino-3,5-dihydro-7-(3-thienylmethyl)-4Hpyrrolo[3,2-d]pyrimidin-4-one, hydrochloride, monohydrate
RE: RCT (Reactant): RACT (Reactant or reagent)
(preparation of
mino-3,5-dihydro-7-substituted-4H-pyrrolo[3,2-d]pyrimidin4-ones via regioselective diazotization/hydrogenation of 2,6-diamino
precursors)
163217-78-5 CAPLUS
4H-Pyrrolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3thienylmethyl)-, monohydrochloride, monohydrate (9CI) (CA INDEX NAME)

● HC1

● H20

L16 ANSWER 22 OF 60 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1995:403408 CAPLUS DOCUMENT NUMBER: 122:314562

TITLE: Process for the synthesis of 2-amino-3,5-dihydro-7-Process for the synthesis of Z-amino-3,5-dihydro-7-substituted-4H-pyrchol[3,2-d]pyrimidin-4-ones via regioselective diazotization/hydrogenation of 2,6-diamino precursors De Jong, Randall L.; Seamans, Ronald E.; Zeller, James R. Warner-Lambett Co., USA

INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE: Warner-Lambert
U.S., 6 pp.
CODEN: USXXAM
Patent
English
1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

			•																	
	PAT	ENT	NO.			KIN	D 1	DATE			APP	LIC	ATI	ON :	NO.		Ð	AŤE		
																	-			
	US	5386	031			Α	1	1995	0131		US	199	3-1	677	51		1	9931	215	<
	CA	2176	040			A1	1	1995	0622		CA	199	4 - 2	176	040		1	9941	26	<
	WO	9516	689			A1	1	1995	0622		wo	199	4 - U	1512	292		1	9941	026	<
				AU,																
				NO.																
		RW:	AT.	BE,	CH.	DE.	DK.	ES.	FR.	GB,	GF	. 1	E,	IT,	LU,	MC,	NĽ,	PT,	SE	
	AU	9480							0703											
	AU	6812	03			B2	-	1997	0821											
	EP	7343	88			A1		1996	1002		EP	199	4-9	320	56		1	9941	026	<
		R:	AT.	BE.	CH.	DE.	DK.	ES.	FR.	GB.	GF	. II	Ε,	IT.	LI,	LU,	MC,	NL,	PT,	SE
	HU	7468																9941		
	JP	0950	6614			Т		1997	0630		JP	199	4 - 5	167	47		1	9941	026	<
	NO	9602	542			À	-	1996	0614									9960		
RIC		APP									US	199	3-1	677	51		A 1	9931	215	<
-											WO	199	4 - L	JS12	292	1	W 1	9941	026	<

WO 1994-US12292 W 19941026 <
OTHER SOURCE(S): CASREACT 122:314562; MARPAT 122:314562
IT 163217-79-6P, 2-Amino-4,5-dihydro-4-oxo-7-(3-thienylmethyl)-3Hpyrrolo[3,2-d]pyrimidine-6-diazonium chloride
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic
preparation); PREP (Preparation); RACT (Reactant) or reagent)
(preparation of
2-amino-3,5-dihydro-7-substituted-4H-pyrrolo[3,2-d]pyrimidin4-ones via regioselective diazotization/hydrogenation of 2,6-diamino
precursors)

predursors)
163217-79-6 CAPLUS
HR-Pyrrolo[3, 2-d]pyrimidine-6-diazonium, 2-amino-4,5-dihydro-4-oxo-7-(3-thienylmethyl)-, chloride (9CI) (CA INDEX NAME)

L16 ANSWER 22 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB A process for the preparation
2-amino-3,5-dihydro-7-substituted-4H-pyrrolo[3,2-d]pyrimidin-4-ones (I) and pharmaceutically acceptable acid addition salts thereof wherein R is acyl or heteroaryl which comprises: Step (a) treating a compound II wherein R is as defined above with a disactization reagent in a solvent to afford III wherein X is Cl, Br, I, BF4, PF6, or H504 and R is as defined abover Step (b) treating III with hydrogen in the presence of a catalyst and a solvent to afford a compound I; Step (c) and, if desired, converting I to a corresponding pharmaceutically acceptable acid addition salt by conventional means, and if so desired, converting the corresponding pharmaceutically acceptable acid addition salt to a compound I by

I by conventional means.

AUTHOR(S): CORPORATE SOURCE:

L16 ANSWER 23 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:334055 CAPLUS
DOCUMENT NUMBER: 122:239630
Pyrrolopyrimidines. I. Electrophilic substitution reactions of 1,3-dimethylpyrrolo[3,2-d)pyrimidine-2,4-disease

reactions of 1,3-dimethylpyrcolo[3,2-d]pyrimidine-idione
Tsupak, E. B.; Tkachenko, Yu. N.; Pozharsky, A. F.
Rostov. Gos. Univ., Rostov-on-Don., 344104, Russia
Khimiya Geterotsiklicheskikh Soedinenii (1994), (9), 1242-8
CODEN: KGSSAQ: ISSN: 0132-6244
Latviiskii Institut Organicheskogo Sinteza
Journal
Russian

PUBLISHER: DOCUMENT TYPE:

LANGUAGE: Russian 162405-70-1P

162405-70-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
162405-70-1 CAPLUS
HT-Pyrrolo[3,2-d]pyrimidine-2.4(3H,5H)-dione, 1,3-dimethyl-6,7-dinitro(9C1) (CA INDEX NAME)

Electrophilic halogenation, aminomethylation, acylation, and azo coupling reactions of the title compound (I) proceed at position 7; nitration in HOAc goes primarily at position 6. In some cases the 6,7-disubstituted derivs. are obtained.

L16 ANSWER 24 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L16 ANSWER 24 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:315430 CAPLUS
TITLE: 20:315430 CAPLUS
Evidence for a pathway independent from 2'-deoxyguanosine and reversible by IL-2 by which purine nucleoside phosphorylase inhibitors block T-cell proliferation
Boehncke, W. -H.; Gilbertsen, R. B.; Hemmer, J.;
STERTY, W.
CORPORATE SOURCE: SOURCE

CODEN: SJIMAX: 155N: UJUU-54...

DOCUMENT TYPE: Journal
LANGUAGE: English
IT 115787-68-3, CI-972
RL: BIOL (Biological study)
(T-cell proliferation suppression by)
RN 115787-68-3 CAPIUS
CN 4H-Pyrcolo[3, 2-d] pyrimidin-4-one, 2, 6-diamino-1, 5-dihydro-7-(3-thienylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

#### ● HC1

Patients with homozygous deficiency of purine nucleoside phosphorylase (PRP) present with a T-cell selective immune deficiency. To elucidate the potential use of PNP inhibitors in the therapy of cutaneous T-cell lymphomas (CTCLs), the authors studied the effects of CI-1000 (EOGM of Cornerly PDI41955-2) and CI-972 on a T-cell line MyLa established from a patient with mycosis fungoides. Both PNP inhibitors had significant, dose-dependent, inhibitory effects on the proliferation of the T-cell line. CI-1000 (EDGS 03.7 µMI) was approx. six-fold more potent in blocking 3H-thymidine uptake than CI-972 (EDSO: 22.5 µMI). The inhibitory effect of either substance could not be increased by addition of deoxyguanosine. Flow cytometric anal. revealed that both PNP inhibitors caused as block in the S-phase of the cell cycle. The inhibitory effect on proliferation was reversible partially by addition of IL-2. When testing proliferation inhibition of both substances on an IL-2-dependent T-cell line (SeAx), their inhibitory effects were reduced significantly. These data document a mechanism of action of the PNP inhibitors independent of deoxyguanosine and partially reversible by IL-2. The observations suggest the potential use of PNP inhibitors in the therapy of cutaneous T-cell lymphomas and provide evidence for a pathway independent from deoxyguanosine by which PNP inhibitors might function in T cells.

L16 ANSWER 25 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1994:107047 CAPLUS DOCUMENT NUMBER: 120:107047

9-Substituted-8-halo or -8-hydroxy-9-deazaguanines as TITLE: y-supstituted-8-halo or -8-hydroxy-9-deazaqua inhibitors of purine nucleoside phosphorylase Josyula, Ushar-Sircar, Jagadish C. Warner-Lambert Co., USA U.S., 7 pp. CODEN: USXXAM Parent

INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. DATE APPLICATION NO. KIND DATE US 5236926 A 19930817 US 5281708 A 19940125 PRIORITY APPLM. INFO::
OTHER SOURCE(S):
MARPAT 120:107047 IT 152581-31-2P 152581-33-4P 152581-34-5P 19920203 <--19930304 <--A3 19920203 <--US 1992-829850 US 1993-27212 US 1992-829850

152581-35-6P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and purine nucleoside phosphorylase inhibitory activity of) 152581-31-2 CAPLUS 4H-Pyrcno[0], 2-d]pyrimidin-4-one, 2-amino-6-bromo-1,5-dihydro-7-(3-thienylmethyl)- (9CI) (CA INDEX NAME)

152581-33-4 CAPLUS 4H-Pyrrolo[3,2-d]pyrimidin-4-one, 2-amino-1,5-dihydro-6-iodo-7-(3-thienylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

#### • HC1

152581-34-5 CAPLUS
4H-Pyrcolo[3,2-d]pyrimidin-4-one, 2-amino-6-chloro-1,5-dihydro-7-(3-thienylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

Page 120

L16 ANSWER 25 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

● HC1

152581-35-6 CAPLUS
IH-Pyrcalo[3, 2-d]pyrimidine-6-diazonium, 2-amino-4,5-dihydro-4-oxo-7-(3-thienylmethyl)-, tetrafluoroborate(1-) (9C1) (CA INDEX NAME)

CRN 152581-28-7 CMF C11 H9 N6 O S

СM 2

14874-70-5 B F4 CCS

152581-36-7P
RL: SPN [Synthetic preparation); PREP (Preparation)
(preparation and purinenucleoside phosphorylase inhibitory activity of)
152581-36-7 CAPLUS
4H-Pyrcno[03,2-d]pyrimidin-4-one, 2-amino-6-fluoro-1,5-dihydro-7-(3-thienylmethyl) - (9CI) (CA INOEX NAME)

L16 ANSWER 25 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

152581-32-3 CAPLUS
Propanamide, N-[4,5-dihydro-6-iodo-4-oxo-7-(3-thienylmethyl)-1H-pyrrolo[3,2-d]pyrimidin-2-yl]-2,2-dimethyl- (9CI) (CA INDEX NAME)

IT 115787-59-2
R1: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of purine nucleoside phosphorylase inhibitors)
RN 115787-59-2 CAPLUS
CN 4H-Pyrcolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3-thienylmethyl) - [9CI) (CA INDEX NAME)

Title compds. I [R = (un)substituted Ph, 3-thienyl: R2 = H, (un)substituted MH2: X = P, Cl. Br, I, OH; n = 0-4], which are inhibitors of purine nucleoside phosphorylase and are selectively cytotoxic to T lymphocytes but not to B cells, are prepared Thus, 2,6-diamino-3,5-dihydro-7-(3-thienylnethyl)-4H-pyrclolpyrimidin-4-one was diazotized and reacted with HPF6, the diazonium intermediated brominated, then amidated with

Page 121

L16 ANSWER 25 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

152581-29-8P 152581-30-1P 152581-32-3P
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent)
(preparation and reaction of, in preparation of purine nucleoside phonylare

(preparation and reaction of, in preparation of purine nucleoside phosphorylase inhibitors and T cell cytotoxic agents)

RN 152591-29-8 CAPLUS
CN IH-Pyrcolo[3,2-0]pyrimidine-6-diazonium, 2-amino-4,5-dihydro-4-oxo-7-(3-thienylmethyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CRN 152581-28-7 CMF C11 H9 N6 O S

2 CM

CRN CMF CCI 16919-18-9 F6 P CCS

152581-30-1 CAPLUS
Propanamide, N-[6-bromo-4,5-dihydro-4-oxo-7-(3-thienylmethyl)-lHpyrrolo[3,2-d]pyrimidin-2-yl]-2,2-dimethyl- (9CI) (CA INDEX NAME)

L16 ANSWER 25 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) pivalic anhydride, and the amide hydrolyzed, forming 2-amino-6-bromo-3,5-dihydro-7-(3-thieny)lmethyl-4H-pyrcho[3,2-d)pyrimidin-4-one, which demonstrated 501 inhibitory concn. against purine nucleoside phosphorylase

L16 ANSWER 26 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1994:286 CAPLUS

1004:286 CAPLUS

1104:286 CAPLUS

120:286

PD 141955 and CI-972; 9-deazaguanine analog purine nucleoside phosphorylase inhibitors. II. Effects on nucleoside catabolism in human and rat blood in vitro

AUTHOR(S): Dong, Mi K.; Gilbertsen, Richard B.

Parke-Davis Pharm. Res., Warner-Lambert Co., Ann Arbor, MI, 48105, USA

Agents and Actions (1993), 39(Spec. Conf. 15sue), C99-C101

CODEN: AGACBH: ISSN: 0065-4299

DOCUMENT TYPE:

Journal

DOCUMENT TYPE: LANGUAGE: IT 115787-68-3, CI-972

RL: BIOL (Biological study) (nucleoside catabolism response to, in blood of humans and lab animals) 11587-68-3 CAPLUS 4H-Pyrcolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3-thienylmethyl)-, monohydrochloride (9CI) (CA IMDEX NAME)

#### • HC1

Patients with deficiency in purine nucleoside phosphorylase (PNP) have elevated levels of the PNP substrates inosine, guanosine, and (carely) 2'-deoxyguanosine (GdR) in their plasma and urine. GdR is critical because it serves as a precursor of GdTP, which blocks T-cell replication, thus leading to T-cell-selective immune dysfunction. The authors adapted these findings to the study of PNP inhibitors in human and rat blood in vitro. Blood was spiked with GdR (2.5 µg/mL) and the effects of PD 141955 (9-deaza-9-(3-thienylmethyl))quanine: 2-amino-3,5-dihydro-7-(3-thienylmethyl)-4H-pyrcolo[3,2-dipyrimdin-4-one) and CI-972 (8-amino-9-deaza-9-(3-thienylmethyl)yuanine: 2,6-diamino-3,5-dihydro-7-(3-thienylmethyl)-4H-pyrcolo[3,2-dipyrimdin-4-one) on GdR catabolism were determined GdR was metabolized 89 times faster in human blood than in rat blood (half-life -12.0 ± 1.4 s in human blood). When PD 141955 (1 µg/mL) was added to human blood before spiking, the GdR half-life increased to > 60 min. In contrast, Cl-972 (1 µg/mL) extended the GdR half-life to 7.2 ± 1.7 min. Both PD 141955 and CI-972 at 1 µg/mL significantly retarded GdR catabolism from rat blood.

L16 ANSWER 28 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
DOCUMENT NUMBER:
119:262013 CAPLUS
20:2622 CAPLUS M.; Nivas, Shrir Montgomery, John A.;
Erion, Mark D.
CORPORATE SOURCE:
CORPORATE SOURCE:
AUSTRALIAN SOURCE:
Journal of Pharmacology and Experimental Therapeutics
(1993), 266(2), 707-14
COUEN: JPETAB; ISSN: 0022-3565
JOURNAL D.
DOCUMENT TYPE:
JOURNAL D.
LANGUAGE:
English
Harden Source
Phosphorylase inhibition and structure in relation to)
RN 151561-95-4 CAPLUS
CN 4H-Pyrcolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,7-dihydro-7-(3-thienylmethyl)- (9CI) (CA INDEX NAME)

151561-96-5 CAPLUS 4H-Pyrrolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,7-dihydro-7-(phenylmethyl)-(9C1) (CA INDEX NAME)

Certain derivs. of 9-deazaguanine that contain arylmethyl, heteroarylmethyl or cycloalkylmethyl groups at the 9-position are potent inhibitors of purine nucleoside phosphorylase (PNP, E.C. 2.4.2.1). To determine whether these agents can produce metabolically significant

determine whether these agents can produce mesons..., ..., inhibition of PNP in cells and in animals, the authors performed pharmacol. studies with a representative member of the series, 9-benzyl-9-deazaquanine (BzDAG). BzDAG was a potent inhibitor of PNP from calf spleen (KI = 12 nM). It was also an effective inhibitor of PNP in cells and in animals as shown by the findings that it 1) inhibited the conversion of inosine to nucleotides in L1210 cells in culture at concess. that had little effect on the utilization of hypoxanthine; 2) potentiated the toxicity of

Page 122

L16 ANSWER 27 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:285 CAPLUS
DOCUMENT NUMBER: 120:285
PD 141955 and CI-972: 9-deazaguanine analog purine nucleoside phosphorylase inhibitors. I. Suppression of the human mixed lymphocyte reaction (MLR)
AUTHOR(S): Vilburn, David J., Dong, Mi K.: Gilbertsen, Richard B.
Parke-Davis Pharm. Res., Warner-Lambert Co., Ann
Arbor, MI, 48105, USA
Agents and Actions (1993), 39(Spec. Conf. Issue), C96-C98
CODEN: AGACBH; ISSN: 0065-4299
Journal

DOCUMENT TYPE: Journal English

LANGUAGE: IT 115787-68-3, CI-972

RL: BIOL (Biological study)
(T-cell-selective immunos
phosphorylase inhibitor)
115787-68-3 CAPLUS immunosuppression by, as purine nucleoside

15787-68-3 CAPLUS 4H-Pyrrolo(3,2-d)pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3-thienylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

#### ● HC1

Inhibitors of purine nucleoside phosphorylase (PNP) are of interest as potential T-cell-selective immunosuppressive agents and for other uses. PO 141955 [9-deaza-9-(3-thienylmethyl)guanine? Z-maino-3,5-dihydro-7-(3-thienylmethyl)guanine? all-purine thyl)-4H-pyrcolo[3,2-d]pyrinidin-4-one) is 12- to 100-fold more potent than CI-972 [8-maino-9-deaza-9-(3-thienylmethyl)guanine; 2,6-diamino-3,5-dihydro-7-(3-thienylmethyl)-4H-pyrcolo[3,2-d]pyrinidin-4-one) in PNP enzyme inhibition assays. In the human MIR, PD 141955 has ICSOs of 2.8 and 12.8 μM in the presence and absence, resp., of 15 μM GGR (means from 10 assays), while the ICSOs of C1-972 tested in parallel are > 30 μM. Concentration-dependent accumulation of dGTP occurs

PD 141955-treated MLRs under conditions in which CI-972 lacks detectable activity. Thus, consistent with its greater PNP inhibitory activity in a cell free system, PD 141955 is significantly more potent than CI-972 in its ability to suppress the MLR.

ANSWER 28 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) deoxyguanosine to CCRF-CEM cells in culture: 3) increased the pools of deoxy GTP in CCRF-CEM, Molt-3 and Molt-4 cells that had been treated with deoxyguanosine: 4) prevented the toxicity of 6-thioguanosine to HED-2 cells in culture: 5) increased the plasma levels of endogenous inosine in rats; and 6) increased the plasma levels of 2',3'-dideoxyinosine in rats that had received BzDAG and dideoxyinosine in combination. Pharmacokinetic anal. of BzDAG in the rat showed it to be 481 orally bicavailable (at a dose of 5 mg/kg). About 951 of BzDAG was protein bound. After i.v. administration of BzDAG (5 mg/kg), more than 501 of the erythrocyte PNP was inhibited for 40 min. These results indicate that the 9-substituted 9-deazaguanines are potent orally active PNP inhibitors and are therefore of potential clin. interest as immunosuppressive and anti-inflammatory agents.

L16 ANSWER 29 OF 60
ACCESSION NUMBER:
DOCUMENT NUMBER:
119:151496 CAPLUS
119:151496
119:151496 CAPLUS
119:151496 CAPLUS
119:151496 CAPLUS
119:151496
119:151496 CAPLUS
119:151

DOCUMENT TYPE: LANGUAGE:

UAGE: English
115707-60-3, CI-972
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified): THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(immunosuppressant activity of)
115787-68-3 CAPLUS
4H-Pyrcrolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3-thienylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

with 8 refs., of the inhibitory actions of CI-972 and PD 141955 B and T cell lymphoblastoid cell line [3H]TdR uptake and dGTP

ANSWER 30 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 4H-Pyrrolo(3,2-d)pyrimidin-4-one, 2-amino-7-(cyclohexylmethyl)-1,5-dihydro-6-nitro- (9CI) (CA INDEX NAME)

AB Alicyclic and heteroalicyclic derivs. of 9-deazaguanine [2-amino-1,5-dihydro-4H-pyrrolo[3,2-d[pyrimidin-4-one) are, with one exception, potent inhibitors of purine nucleoside phoshporylase [I] equaling the corresponding 9-arylmethyl derivs. previously investigated. The mode of binding of these compds. to I was determined by x-ray crystallog.

L16 ANSWER 30 OF 60
ACCESSION NUMBER:
DOCUMENT NUMBER:
11TLE:
1TLE:
11TLE:
11TLE:
11TLE:
11TLE:
11TLE:
11TLE:
11TLE:
11TLE:
11TL

Guida, Wayne C.: Ealick, Steven E.: Montgomery, Joh
A.
CORPORATE SOURCE:
SOURCE:
SOURCE:
Journal of Medicinal Chemistry (1993),
36(13), 1847-54
COEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE:
LANCUAGE:
English
THER SOURCE(S):
CASREACT 119:72420
IT 139367-73-0DP, purine nucleoside phosphorylase complex
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and crystal structure of)
RN 139367-73-0 CAPUS
CN 4H-Pyrcolo[3, 2-d]pyrimidin-4-one, 2,6-diamino-7-(cyclohexylmethyl)-1,5-dihydro- (9CI) (CA INDEX NAME)

139367-73-0P IT

L3936-7-13-OP
RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and purine nucleoside phosphorylase inhibitory activity of)
139367-73-0 CAPUS
4H-Pyrcolo[3.2-d]pyrimidin-4-one, 2.6-diamino-7-(cyclohexylmethyl)-1.5-dihydro- (9CI) (CA INDEX NAME)

148020-45-5P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) ΙŤ

(preparation and reduction of) 148020-45-5 CAPLUS

L16 ANSWER 31 OF 60 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1993:419923 CAPLUS DOCUMENT NUMBER: 119:19923

TITLE:

Application of crystallographic and modeling methods in the design of purine nucleoside

AUTHOR(S):

Application of crystallographic and modeling methods in the design of purine nucleoside phosphorylase inhibitors. [Etratum to document cited in CAll6(13):120391p]
Ealick, Steven E.; Babu, Y. Sudhakar; Bugg, Charles E.; Erion, Mark D.; Guida, Wayne C.; Montgomery, John A.; Secrist, John A., III
Ninv. Alabama, Birmingham, Al., 35294, USA
Proceedings of the National Academy of Sciences of the United States of America (1992), 89(20), 9974 CORPORATE SOURCE:

CODEN: PNASA6; ISSN: 0027-8424

DOCUMENT TYPE: Journal LANGUAGE: English IT 115787-58-1 115787-59-2 139367-73-0

115787-59-1 115787-59-2 139367-73-0
RI: BIOL (Biological study)
(purine nucleoside phosphorylase inhibition by, structure in relation to (Erratum))
115787-58-1 CAPUS
4H-Pyrcolo(3, 2-d) pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(phenylmethyl)-(9CI) (CA INDEX NAME)

115787-59-2 CAPLUS 4H-Pyrcolo[3,2-d|pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3-thienylmethyl)- (9CI) (CA INDEX NAME)

139367-73-0 CAPLUS 4H-Pyrcolo[3,2-d]pyrimidin-4-one, 2,6-diamino-7-[cyclohexylmethyl]-1,5-dihydro-[3CI] (CA INDEX NAME)

L16 ANSWER 31 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

AB An error in the footnote on p. 11540 giving incorrect Protein Data Bank reference codes has been corrected. The error was not reflected in the index entries.

L16 ANSWER 33 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:81339 CAPLUS
1111E: 113:81339 CAPLUS
118:81339 Preparation of (arylmethyl)deazaguanines as immunomodulators
PATENT ASSIGNEE(S): Varner-Lambert Co., USA
AUSTRIAN, 14 pp.
CODEN: AUXXAK
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1 DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE 19921012 AT 395156 B 19921012 AT 8702655 A 19920215 PRIORITY APPLN. INFO.: OTHER SOURCE(5): MARPAT 118:81339 IT 115787-58-1P 115787-59-2P 115787-60-5P 115787-61-6P 115787-68-3P 115812-51-6P 19871008 <--AT 1987-2655 19871008 <--AT 1987-2655

145671-78-9P
RL: SPN (Synthetic preparation), PREP (Preparation)
(preparation of, as immunomodulator)
115787-58-1 CAPLUS
4H-Pyrcolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(phenylmethyl)(9CI) (CA INDEX NAME)

115787-59-2 CAPLUS 4H-Pyrrolo(3, 2-d)pyrimidin-4-one, .2,6-diamino-1,5-dihydro-7-(3-thienylmethyl)- (9CI) (CA INDEX NAME)

115787-60-5 CAPLUS 4H-Pyrcolo[3,2-d]pyrimidin-4-one, 2,6-diamino-7-(2-furanylmethyl)-1,5-dihydro-(9CI) (CA INDEX NAME)

L16 ANSWER 32 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1993:94336 CAPLUS DOCUMENT NUMBER: 118:94336

DOCUMENT NUMBER: TITLE:

118:94336
Treating infectious encephalitis with neuronal amino acid receptor-blocking agents
Bernton, Edward W.: Tortella, Frank C.
United States Dept. of the Army, USA
PCT Int. Appl., 34 pp.
CODEN: PIXXD2
Patent
English
1

INVENTOR(S): PATENT ASSIGNEE(S):

SOURCE:

LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

DOCUMENT TYPE:

PATENT NO. KIND DATE APPLICATION NO. DATE WO 9221340

A1 19921210 WO 1992-U94454 19920527 W: AT, AU, BB, BG, BR, CA, CH, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MW, NL, NO, PL, RO, RU, SD, SE
RW: AT, BE, BF, BJ, CF, CG, CH, CH, DE, DK, ES, FR, GA, GB, GN, GR, 1T, LU, MC, ML, MR, NL, SE, SN, TD, TG
AU 9221537

PRIORITY APPLN. INFO::

WO 1992-US4454

A 19920527 19920527 <--

19920527 <--A 19910605 <--A 19920527 <--

WO 1992-US4454 A 15
115787-68-3, CI-972
RL: BIOL (Biological study)
(infectious and parainfectious encephalitis treatment by)
115787-68-3 CAPLUS
4H-Pyrrclo[3,2-d] pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3-thienylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

Infectious and parainfectious encephalitis and encephalopathy from diverse causes, are treated with agents which block the neuronal excitatory amino acid receptor, specifically the N-methylaspartate binding receptor, or with other drugs which block amino acid excitotoxicity by inhibiting release of endogeneous excitatory amino acids. The drugs of choice are MK-801, dextromethorphan, carbetapentane, 7-chlorokynurenic acid, caramiphen, etc. The in-vitro degradation and lysis of fetal rat neurons by Mycoplasma fermentans was inhibited by pretreatment with MK-801.

L16 ANSWER 33 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

115787-61-6 CAPLUS
4H-Pyrcolo(3,2-d)pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-[(2-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

115787-68-3 CAPLUS
4H-Pyrcolo(3,2-d) pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3-thienylmehy)1-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

115812-51-6 CAPLUS 4H-Pyrcolo(3,2-d)pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(2-thienylmethyl)- (9C1) (CA INDEX NAME)

145671-78-9 CAPLUS 4H-Pyrcolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1.5-dihydro-7-(2-thienylmethyl)-, hydrochloride (9CI) (CA INDEX NAME)

L16 ANSWER 33 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

HC1

GΙ

Title compds. [I: At = (MeO-substituted) Ph.  $\alpha$ - or 3-thienyl, 2-furyl], were prepared Thus, PhCH2CH(CN)CO2Et was stirred 15 min with NaH in DMF: 2-amino-6-chloro-5-nitro-4 (3H)-pyrimidinone in DMF was added and the mixture was kept 24 h at 65° to give 621 intermediate II (R = CO2Et). This was stirred 1 h in 1 N NaOH to give 361 II (R = H). The latter was heated with Na25204 in 1N NaOH at 90° followed by treatment with HCl to give 231 I (Ar = Ph). I inhibited purine nucleoside phosphorylase with ICSO = 0.9-3.18  $\mu$ M. I showed cytotoxicity to T-cells but not B-cells in the presence of 2'-deoxyguanosine.

ANSWER 34 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) The resp. 1650 values for inhibition of MOLT-4 cell growth in the absence and presence of 10 mM 2'-deoxyguanosine (6dR) were >50 and 5.06 μM for C1-972 and 15.4 and 0.061 μM for PD 141955. PD 141955 induced accumulation of dGTP in GGR-treated MOLT-4 and CEM cells at log-lower concns. than were required of CI-972, and the magnitude of dGTP accumulation in PD 141955 retated T cell cultures was markedly greater (e.g. 366 vs 100 pmol/106 CEM cells at 10 mM). PD 141955 administered orally produced a dose-dependent elevation of plasma inosine and guanosine in rats over a broad concn. range. Mean plasma inosine concns. following a 150 mg/kg p.o. dose peaked at 6.21 and 13.2 μM in CI-972 and PD 141955-treated rats, resp. Low levels of inosine were detectable at 50 μg/kg following oral administration of PD 141955.

L16 ANSWER 34 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1992:625928 CAPLUS DOCUMENT NUMBER: 117:225928 Comparative for the comparat 117:22928 Comparative in vitro and in vivo activities of two 9-deazaguanine nanlog inhibitors of purine nucleoside phosphorylase, CI-972 and PD 14195 Gilbertsen, Richard B.; Josyula, Usha; Siccar, Jagadish C.; Dong, Mi K.; Wu, Wen Shen; Conroy, Mary AUTHOR(S): Carol Parke-Davis Pharm. Res., Warner-Lambert Co., Ann Arbor, MI, 48105, USA Biochemical Pharmacology (1992), 44(5), CORPORATE SOURCE: SOURCE: CODEN: BCPCA6; ISSN: 0006-2952 Journal English 996-9 DOCUMENT TYPE: LANGUAGE: IT 115787-68 JAGE: English
115787-68-3, CI972
RL: BIOL (Biological study)
(purine nucleoside phosphorylase inhibition by, T-cell suppression in relation to)
115787-68-3 CAPLUS
4H-Pyrrclo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3-thienylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

GI

An in-parallel comparison is presented of the in vitro and in vivo properties, of two 9-deazaguanine analog inhibitors of purine nucleoside phosphorylase (ENP), CI-972 (I) and PD 141955 (II) (published Ki values of 0.83-8.0 and 0.08 µM, resp.). Despite structural similarities, PD 141955 was considerably more potent and active in all systems studied.

L16 ANSWER 35 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1992:400488 CAPLUS 117:488

### APPLOS CAPLUS 117:488
Biochemical and pharmacological properties of CI-972, a novel 9-deazaquanine analog purine nucleoside phosphocylase (PNP) inhibitor (ilbectsen, Richard B.; Dong, Mi K.; Wilburn, David J.; Kossarek, Lynn M.; Sircar, Jagadish C.; Kostlan, Catherine R.; Conroy, Mary Carol, Parke-Davis Pharm. Res. Div., Warner-Lambert Co., Ann Arbor, MI, 48105, USA Advances in Experimental Medicine and Biology (1991), 309A(Purine Pyrimidine Metab. Man 7, Pt. A), 41-4
CODEN: ABMBAP: ISSN: 0065-2598
Journal English DOCUMENT NUMBER: TITLE:

AUTHOR (5):

CORPORATE SOURCE:

SOURCE:

CODEN: APMBP; ISSN: 0065-2598

DOCUMENT TYPE: Journal
LANGUAGE: English
T1 115787-68-3, CI-972
Rl: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(Darmacol. of, as immunosuppressant)
115787-68-3 CAPLUS
4H:Pyrcolo[3.2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3-thienylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HC1

CI-972 (2.6-diamino-3.5-dihydro-7-(3-thienylmethyl)-4H-pycrolo[3,2-d]pyrimidin-4-one monohydrochloride, monohydratel is a novel inhibitor of PNP (Ki = 0.83 µM) under development as a T cell-selective immunosuppressive agent. CI-972 inhibited proliferation (3H-thymidine uptake) of human MoI.4 (T cell) but not MoI.-8 (B cell) lymphoblasts with resp. IC50s of 3.0 and >50 µM when tested with 10 µM 2'-deoxyguanosine. Without addition of exogenous 2'-deoxyguanosine, Cl-972 was not inhibitory to any human T or B lymphoblastoid cell line tested. 2'-Deoxycytidine (10 µM), but not hypoxanthine or adenine, restored MoII-4 cells growth. Inhibition of 3H-thymidine uptake in MOIT-4 cells correlated with accumulation of dGTP, while alterations in guanine nucleotides were not observed 2'-Deoxycytidine (10 µM) also blocked dGTP accumulation in MOIT-4 cells. Cl-972 showed activity in vivo over a broad dose range: At 5-150 mg/kg p.o., Cl-972 produced dose-dependent elevation of plasma inosine one h after administration to rats (mean maximum of 2.62 vs. 0.06 µM in controls). Guanosine was also elevated in a concentration-dependent manner, although the effect was not as impressive Plasma nucleosides remained elevated for up to four h following a single oral dose of Cl-972.

L16 ANSWER 36 OF 60
ACCESSION NUMBER:
1992:400065 CAPLUS
117:65
Pyrcolo[3,2-d]pyrimidines, a new class of purine nucleoside phosphorylase (PNP) inhibitors as potential T-cell selective immunosuppressive agents
Siccar, J. C.; Kostlan, C. R.; Gilbertsen, R. B.; Dong, M. K.; Cetenko, W. A.
CORPORATE SOURCE:
ACCENTAGE ADVANCE:
BOUNCE:
ACCENTAGE ADVANCES IN THE CONTROL OF THE CONTROL

DOCUMENT 1.12.

LANGUAGE: English

IT 115787-68-3

RL: BIOL (Biological study)

(as immunosuppressant, T-lymphocyte suppression in, purine nucleoside phosphorylase inhibition in relation to, in humans and laboratory

als)
115787-68-3 CAPLUS
115787-68-3 CAPLUS
4H-Pyrrolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3-thienylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

HC1

A review with 10 refs. emphasizing the activity of CI-972.

L16 ANSWER 37 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

115787-61-6 CAPLUS
4H-Pyrrolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-[(2-methoxyphenyl]methyl]- (9Cl) (CA INDEX NAME)

115812-51-6 CAPLUS 4H-Pyrcolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(2-thienylmethyl)- (9CI) (CA INDEX NAME)

IT

115787-68-3P 115787-71-8P 140676-85-3P 140676-86-4P 140676-87-5P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of) 115787-68-3 CAPLUS 4H-Pyrcolo(3,2-d)pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3-thienylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

115787-71-8 CAPLUS 4H-Pyrrolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-[(2-methoxyphenyl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Page 126

ANSWER 37 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN SSION NUMBER: 1992:227846 CAPLUS MENT NUMBER: 116:227846 ACCESSION NUMBER:

ACCESSION NUMBER:

1992:227846 CAPLUS

DOCUMENT NUMBER:

116:227846

116:227846

116:227846

116:227846

Inhibitors of human purine nucleoside phosphorylase. Synthesis of pyrrolo[3,2-d]pyrimidines, a new class of purine nucleoside phosphorylase inhibitors as potentially T-cell selective immunosuppressive agents. Description of 2.6-diamino-3,5-dihydro-7-(3-thienylmethyl)-4H-pyrrolo[3,2-d]pyrimidin-4-one (CI-972)

AUTHOR(S):

Sircar, Jagadish C.; Kostlan, Catherine R.; Gilbertsen, Richard B.; Bennett, Mary K.; Dong, Mi K.; Cetenko, W. J.

CORPORATE SOURCE:

Parke-Davis Pharm. Res. Div., Warner-Lambert Co., Ann Arbor, MI, 48105, USA

Journal of Medicinal Chemistry (1992), 35(9), 1605-9

CODEN: JNCMAR; ISSN: 0022-2623

DOCUMENT TYPE:

Journal

LANGUAGE:

DOCUMENT TYPE:

Journal

LANGUAGE:

Sircar, Saparation of PREP (Preparation)

(preparation and human purine nucleoside phosphorylase inhibition by, as T-cell selective immunosuppressant)

RN 115787-59-1 CAPLUS

CN 4H-Pyrrolo[3, 2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(phenylmethyl)-(9CI) (CA INDEX NAME)

115787-59-2 CAPLUS 4H-Pyrrolo[3,2-d]pyrimidin-4-one, 2.6-diamino-1,5-dihydro-7-(3-thienylmethy1)- (9CI) (CA INDEX NAME)

115787-60-5 CAPLUS
4H-Pycrolo[3,2-d]pycimidin-4-one, 2,6-diamino-7-(2-furanylmethyl)-1,5-dihydro- (9CI) (CA INDEX NAME)

L16 ANSWER 37 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

● HC1

140676-85-3 CAPLUS 4H-Pyrcolo(3,2-d)pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(phenylmethyl)-, monohydrochloride (9C1) (CA INDEX NAME)

HC1

140676-86-4 CAPLUS 4H-Pyrrolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(2-thienylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

HC1

140676-87-5 CAPLUS
4H-Pyrrolo[3,2-d]pyrimidin-4-one, 2,6-diamino-7-(2-furanylmethyl)-1,5-dihydro-, monohydrochloride (9CI) (CA INDEX NAME)

L16 ANSWER 37 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

HC1

GI

Purine nucleoside phosphorylase (PNP) is a purine-metabolizing enzyme in the purine cascade and has been a target for drug design for sometime. A series of potent human PNP inhibitors, pyrrolo[3,2-d]pyrimidines (9-deazaguanies), has been synthesized and evaluated in the enzyme assay and in the cell line assay using MOLT-4 (T-cell) and MGL-8 (B-cell) lymphoblasts for selectivity. One of the compds. (CI-972 [I), was found to be moderately potent, competitive, and reversible inhibitor of PNP with Ki = 0.83 µM. It was also found to be selectively cytotoxic to MOLT-4 lymphoblasts (ICSO = 3.0 µM) but not to MGL-8 lymphoblasts and was avaluated further. evaluated further.

L16 ANSWER 38 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Competitive inhibitors of the salvage pathway enzyme purine-nucleoside phosphorylass (purine-nucleoside:orthophosphate ribosyltransferase, EC 2.4.2.1) were designed by using the 3-dimensional structure of the enzyme as determined by x-ray crystallog. The process was an iterative one that utilized interactive computer graphics, Monte Carlo-based conformational searching, energy minimization, and x-ray crystallog. The proposed compds. were synthesized and tested by an in vitro assay. Among the compds. designed and synthesized are the most potent competitive inhibitors of purine nucleoside phosphorylase thus far reported.

L16 ANSWER 38 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1992:120391 CAPLUS DOCUMENT NUMBER: 116:120391

Application of crystallographic and modeling methods in the design of purine nucleoside phosphorylase

in the design of purine nucleoside phosphorylase inhibitors
Ealick, Steven E.; Babu, Y. Sudhakar; Bugg, Charles
E.; Erion, Mark D.; Guida, Wayne C.; Montgomery, John
A.; Secrist, John A., III
Univ. Alabama, Birmingham, Al., 35294, USA
Proceedings of the National Academy of Sciences of the
United States of America (1991), 88(24),
115404-118404.

11540-4
CODEN: PNASAG: ISSN: 0027-8424
CODEN: PNASAG: ISSN: 0027-8424
LANGUAGE: English
IT 115787-58-1 115787-59-2 139367-73-0
RL: BIOL (Biological study)
(purine nucleoside phosphorylase inhibition by, structure in relation th

AUTHOR(S):

CORPORATE SOURCE: SOURCE:

to)
115787-58-1 CAPLUS
4H-Pyrrolo[3.2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(phenylmethyl)(9CI) (CA INDEX NAME)

115787-59-2 CAPLUS 4H-Pyrcolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3-thienylmethyl)- (9CI) (CA INDEX NAME)

139367-73-0 CAPLUS 4H-Pycrolo[3,2-d]pyrimidin-4-one, 2,6-diamino-7-(cyclohexylmethyl)-1,5-dihydro- (9CI) (CA INDEX NAME)

L16 ANSWER 39 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1991:574277 CAPLUS DOCUMENT NUMBER: 115:174277

DOCUMENT NUMBER: TITLE:

AUTHOR (S):

CORPORATE SOURCE:

115:174277
Selective in vitro inhibition of human molt-4 T
lymphoblasts by the novel purine nucleoside
phosphorylase inhibitor, CI-972
Gilbertsen, Richard B.; Dong, Mi K.; Kossarek, Lynn
M.; Sircar, Jagadish C.; Kostlan, Catherine R.;
Concoy, Mary Carol
Parke-Davis Pharm. Res. Div., Varner-Lambert Co., Ann
Arbor, MI, 48105, USA
Biochemical and Biophysical Research Communications (
1991), 178 (3), 1351-8
CODEN: BBRCA9; ISSN: 0006-291X
Journal SOURCE:

DOCUMENT TYPE: Journal English

DOCUMENT TYPE:
LANGUAGE:
LT '115787-68-3, CI 972
RL: BIOL (Biological study)
(MOLT-4 T-lymphoblasts of human inhibition by)
RN 115787-68-3 CAPUS
CN 4H-Pyrrolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3-thienylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HC1

GI

CI-972 (I) is a competitive inhibitor of PNPase (E.C. 2.4.2.1., Ki = 0.83 µM) entering clin. trials as a T cell-selective immunosuppressive agent. Neither I (S50 mM) nor dGuo (S10 µM) inhibited [3H]Thd uptake by human MOLT-4 (T cell) or MGL-8 (B cell) lymphoblasts, but in the presence of 10 µM dGuo, the IC50 for I decreased to 3.0 µM for MOLT-4 but remained at >50 µM for MOLT-4 but remained at >50 µM for MOLT-4 but remained at >50 µM for MOLT-4 growth was associated with an increase in dGTP that was dependent on

L16 ANSWER 39 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) concn. and inhibited by 2'-deoxycytidine. Growth could not be restored by hypoxanthine or adenine. No alterations in GTP pools were noted in MOLT-4, and neither GTP nor dGTP were altered in MGL-8.

L16 ANSWER 40 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN cells infected with human immunodeficiency virus. (Continued)

L16 ANSWER 40 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1991:115067 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 114:115067
Combination therapy involving 2',3'-dideoxypurine nucleoside and an inhibitor of purine nucleoside phosphocylase for the treatment of retroviral disease Erion. Mark D.
Ciba-Gelgy A.-G., Switz.
Eur. Pat. Appl., 10 pp.
CODEN: EPXXDW
Patent
German
1 114:115067 TITLE: INVENTOR(S): PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. DATE APPLICATION NO. All 19900620 EP 1989-810920
DE, FR, GB, IT, LI, LU, NL, SE
T 19921215 AT 1989-810920
A 19930621 AU 1989-46074
B2 19920910
All 19900616 CA 1989-60305
A 19900615 DK 1989-6305
A 19900814 JP 1989-321624
A 19900829 ZA 1989-9510
US 1988-284153 19891205 <--CA 1989-2005205 DK 1989-6305 JP 1989-321624 ZA 1989-9510 US 1988-284153 US 1989-315354 EP 1989-810920 19891212 <-19891213 <-19891213 <-19891213 <-19881214 <-19890224 <-19891205 <--OTHER SOURCE(5): MARPAT 114:115067
IT 115787-59-2
RL: BAC (Biological activity or effector, except adverse): BSU (Biological study, unclassified): BIOL (Biological study)
(antiviral activity of dideoxypurine nucleosides enhancement by)
RN 115787-59-2 CAPLUS
CN 4H-Pyrrolo(3,2-cd)pyrtmiddin-4-one, 2,6-diamino-1,5-dihydro-7-(3-thienylmethyl)- (9CI) (CA INDEX NAME)

A combination therapy of 2',3'-dideoxypurine nucleosides with purine nucleoside phosphorylase inhibitors is useful in the treatment of retroviral diseases, such as AIDS. The purine nucleoside phosphorylase inhibitors delay the biodegrdn, and enhance the activity of the 2',3'-dideoxypurine nucleosides. A composition comprised 50 g 2',3'-dideoxylnosine and 1500 g 8-amino-9-(2-thienylmethyl)guanine. Enhancement of the activity of former by the latter was demonstrated on Hg

L16 ANSWER 41 OF 60 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1989:75141 CAPLUS DOCUMENT NUMBER: 110:75141

DOCUMENT NUMBER: TITLE:

110:75141
A novel procedure for preparing pyrrolo[3,2-d]pyrimidine (9-desazapurine) and its
4-oxo-3,4-dihydro derivative (9-desazahpoxanthine)
Ektova, L. V.; Preobrazhenskaya, M. N.
VONTS, Moscov, USSR
Khimiko-Farmatsevticheskii Zhurnal (1988),
22(7), 860-3
CODEN: KHFZAN; ISSN: 0023-1134
Journal
Russian

AUTHOR(S): CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE:

DOCUMENT TIPE: Journal LANGUAGE: Russian OTHER SOURCE(s): CASHEACT 110:75141

IT 118721-31-6P
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
RN 118721-31-6 CAPLUS
CN IH-Pyrrolo[3,2-d]pyrimidine-4,6-dione, 7-{(acetyloxy)methyl]-7-bromo-5,7-dihydro- (9CI) (CA INDEX NAME)

Bromination of pyrrolopyrimidinecarboxaldehyde I (R = CHO, Rl = H) gave 43.5% dibtromo derivative I (R = Rl = Br) (II), which was hydrogenated over PdCl2 to give 78% 9-deazahypoxanthine I (R = Rl = H). Chlorination of II by POCl3 gave 70% 4-chloro derivative III, which was hydrogenated as above

give 79% 9-deazapurine.

L16 ANSWER 42 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1988:493048 CAPLUS
TITLE: 109:93048 Preparation and testing of aralkyldeazaguanines as immunosuppressants
[INVENTOR(S): Kostlan, Catherine Rose; Sircar, Jagadish Chandra
Varner-Lambett Co., USA
EUr. Pat. Appl., 20 pp.
CODEN: EXXXVV
PAMILY ACC. NUM. COUNT: 1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
EP 260491	A1	19880323	EP 1987-112339		19870825 <
.EP 260491	B1	19910911			
R: AT, BE, CH,	DE, ES	, FR, GB,	GR, IT, LI, LU, NL, SE		
CA 1293727	c	19911231	CA 1987-543431		19870730 <
ZA 8705823	Α	19890329	ZA 1987-5823		19870806 <
DK 8704402	Α	19880227	DK 1987-4402		19870824 <
DK 169705	B1	19950116			
FI 9703648	Α	19880227	FI 1987-3648		19870824 <
FI 85856 '	В	19920228			
FI 85856	С	19920610			
NO 8703584 .	A	19880229	NO 1987-3584		19870825 <
NO 166485	В	19910422			
NO 166485	с.	19910731			
AU 8777416	A	19880303			19870825 <
AU 619724	В2 -	19920206			
JP 63088185	A	19880419	JP 1987-209423		19870825 <
AT 67203	T	19910915	AT 1987-112339		19870825 <
ES 2038635	Т3	19930801	ES 1987-112339		19870825 <
US 4923872	A	19900508	US 1989-336585		19890410 <
US 4988702	A	19910129	. US 1990-478610		19900212 <
US 5061707	A	19911029			19901031 <
US 5101030	Α	19920331			19901031 <
US 5102879	A ´	19920407	US 1990-606677 .		19901031 <
CA 1320203	C2	19930713	CA 1991-616019		19910307 <
AU 9175960	A	19910718	AU 1991-75960		19910424 <
AU 630805	B2	19921105			
JP 08311040	Α	19961126	JP • 1996 - 142606		19960605 <
JP 2650644	B2	19970903			
RIORITY APPLN. INFO.:			US 1986-900486		19860826 <
			US 1987-59419		19870618 <
			CA 1987-543431		19870730 <
			EP 1987-112339		19870825 <
			JP 1987-209423		19870825 <
			US 1987-117352		19871112 <
			US 1989-336585		19890410 <
			US 1990-478610	А3	19900212 <

US 1989-33558 US 1989-33558 OTHER SOURCE(S): CASREACT 109:93048, MARPAT 109:93048 IT 115787-58-1P 115787-59-2P 115787-60-5P 115787-61-6P 115787-68-3P 115787-71-8P 115812-51-6P

1.16 ANSWER 42 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

115787-68-3 CAPLUS
4H-Pyrcolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3-thienylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

• HCl

115787-71-8 CAPLUS 4H-Pyrcolof, 2-djpyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-[(2-methoxyphenyl)ecthyl]-, monohydrochloride (9CI) (CA INDEX NAME)

• HC1

115812-51-6 CAPLUS 4H-Pyrrolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(2-thienylmethyl)- (9CI) (CA INDEX NAME)

IT 115787-68-3P Page 129

L16 ANSWER 42 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RL: BAC (Biological activity or effector, except adverse): BSU (Biological study, unclassified): SFN (Synthetic preparation): THU (Therapeutic use):
BIOL (Biological study): PREP (Preparation): USES (Uses)
(prepn. of, as immunosuppressant)
RN 115787-58-1 CAPLUS
CN 4H-Pyrrolo[3,2-0]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(phenylmethyl)(9CI) (CA INDEX NAME)

115787-59-2 CAPLUS 4H-Pyrrolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-(3-thienylmethyl)- (9CI) (CA INDEX NAME)

115787-60-5 CAPLUS 4H-Pyrrolo[3,2-d]pyrimidin-4-one, 2,6-diamino-7-(2-furanylmethyl)-1,5-dihydro- (9CI) (CA INDEX NAME)

115787-61-6 CAPLUS
4H-Pyrcolo[3,2-d]pyrimidin-4-one, 2,6-diamino-1,5-dihydro-7-[(2-methoxyphenyl]methyl]- (9CI) (CA INDEX NAME)

ANSWER 42 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continual Continual Contin (Continued)

HC1

GI

(CH<sub>2</sub>) nR4 I

The title compds. [I; Rl, R3 = H, NH2: R2 = OH, SH: R4 = (substituted) Ph, 2- or 3-thienyl, 2- or 3-furanyl; n = 0-4] were prepared for treatment of postiasis, gout, autoimmune diseases, or transplant rejection.

2-mino-6-chloro-5-nitro-4(3H)pyrimidinone in OHF was added to 2-cyano-3-(3-thienyl)propionate and NaH in OHF and the mixture was stirred at 70 overnight to give 52t thienylethylpyrimidinone II (R5 = COZMe). The latter was saponified with aqueous NaOH and decarboxylated in to

give II (RS = H), which was heated in aqueous NaOH containing Na2S2O4 to

(R1 = R3 = NH2, R2 = OH, R4 = 3-thienyl, n = 1). The latter had an IC50 of 0.9  $\mu m$  for inhibition of purine nucleoside phosphorylase.

L16 ANSWER 43 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
1988:400242 CAPLUS
109:242
Amine derivatives of pyrcolo[3,2-d]pyrimidines
AUTHOR(S):
AUTHOR(S):
CORPORATE SOURCE:
SOURCE:
VNIKHT im. Ordzhonikidze, Moscow, USSR
Khimiko-Farmatsevticheskii Zhurnal (1988),
22(2), 185-91
CODEN: XHFZAN; ISSN: 0023-1134

114685-17-5 CAPLUS SH-Pyrrolo[3,2-d]pyrimidine-7-methanamine, N-[2-(1-cyclohexen-1-y1)ethy1]-4-[[2-(1-cyclohexen-1-y1)ethy1]amino]-2-methy1-6-pheny1- (9CI) (CA INDEX

(Continued)

1.16 ANSWER 43 OF 60 CAPLUS COPYRIGHT 2007 ACS ON STN

GI

A series of 28 derivs. (I) Rl = Me, Cl, amino: R2 = Cl, amino: R3 = H, Ph) R4 = H, aminomethyl) was prepared by reactions of the chloro derivs. of pycrolo[3, 2-d] pycimidines with an appropriate amine. Toxicity and antitumen, antibacterial, and antitumen activities of I were tested in mice, rats, and in vitro in cultures of Staphylococcus aureus, Escherichia coli, Microsporum canis, and Candida ablocans. Most I had some antitumor activity against implanted saccomas, melanomas, and carcinomas. No I was active against E coli, M. canis, or C. albicans. Toxicity of I varied with L050 = 50->500 mg/kg.

L16 ANSWER 43 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

114685-18-6 CAPLUS
5H-Pyrrolo[3,2-d]pyrimidine-7-methanamine, 4-[{2-{1-cyclohexen-1-y}}ethyl]amino]-2-methyl-N-{2-methylpropyl}-6-phenyl-(9CI) (CA INDEX NAME)

114685-19-7 CAPLUS B-Alanine, N-[(4-[[2-(1-cyclohexen-1-y1)ethyl]amino]-2-methyl-6-phenyl-5H-pyrrolo[3,2-d]pyrimidin-7-yl]methyl]- (9CI) (CA INDEX NAME)

L16 ANSWER 44 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
DOCUMENT NUMBER:
107:236645
TITLE:
107:236645
1.3-Dipolar cycloaddition reactions of thiazolo[5,4-d]pyrimidine 1-oxides with acetylenic esters involving new ring transformations of the thiazolo nucleus ring transformations of the thiazolo nucleus ring transformations of the chiazole nucleus ring transformatio

71411-50-2 CAPLUS
HH-Pyrrolo[3,2-d]pyrimidine-6,7-dicarboxylic acid, 2,3,4,5-tetrahydro1,3,5-trimethyl-2,4-dioxo-, dimethyl ester (9CI) (CA INDEX NAME)

111611-49-5 CAPLUS
1H-Pyrrolo(3,2-d)pyrimidine-6,7-dicarboxylic acid, 2,3,4,5-tetrahydro-1,3-dimethyl-2,4-dioxo-, 6-ethyl 7-methyl ester (9C1) (CA INDEX NAME)

L16 ANSWER 44 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

111624-67-0 CAPLUS
1H-Pyrcolo[3,2-d]pyrimidine-6,7-dicarboxylic acid, 2,3,4,5-tetrahydro-1,3-dimethyl-2,4-dioxo-, 6-methyl 7-ethyl ester (9C1) (CA INDEX NAME)

The reaction of 2-(methoxycarbonyl)-4,6-dimethylthiazolo[5,4-d]pyrimidine-5,7(4H,6H)-dione 1-oxide (1) with di-Me acetylenedicarboxylate resulted in a new ring transformation of the thiazole nucleus to give 5-[2-methoxaly1-1,2-bis[methoxycarbonyl)vinyl]imino-1,3-dimethyl-6-thiobarbituric acid, 6,7-bis(methoxycarbonyl)-1,3-dimethylpyrimido[4,5-b][1,4]thiazine-2,4-(H,H)-dione, 6,7-bis(methoxycarbonyl)-1,3-dimethylpyrimido[4,5-b][1,4]thiazine-2,4-(H,H)-dione, and anhydro-2-[1-methoxaly1-1-(0)sodium methoxycarbonyl)]methyl-4,6-dimethylthiazolo[5,4-d]pyrimidine-5,7(4H,6H)-dione, and anhydro-2-(1-methoxycarbonyl)-1-(methoxycarbonyl)-4,6-dimethylthiazolo[5,4-d]pyrimidine-5,7(4H,6H)-dione, and 6-(2-benzoyl-2-(ethoxycarbonyl)-1-(methoxycarbonyl)-1-(methoxycarbonyl)-6-(methoxycarbonyl)-1,3-dimethylpyrimido[4,5-b][1,4]thiazine-2,4(1H,3H)-dione, and 7-(ethoxycarbonyl)-6-(methoxycarbonyl)-1,3-dimethylpyrimido[4,5-b][1,4]thiazine-2,4(1H,3H)-dione, and 7-(ethoxycarbonyl)-6-(methoxycarbonyl)-1,3-dimethylpyrimido[3,2-d]pyrimidine-2,4(1H,3H)-dione. The structures of these products were supported by their spectral [IR, mass spectra, UV. IH-MM or 13C-MMR) data or by single-crystal x-ray diffraction anal. as well as by chemical transformation of the thiazole nucleus can be best explained by taking into account the initial involvement of a. 1,3-dipolar cycloaddn. reaction.

L16 ANSWER 45 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) L16 ANSWER 45 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1985:504907 CAPLUS

DOCUMENT NUMBER:

TITLE:

1393:304907 ACAPUS
103:104907
Purines, pyrimidines, and imidazoles. Part 61.
Reaction of 6-alkylamino-4-chloro-5-nitropyrimidines with diethyl malonate, ethyl cyanoacetate, and ethyl acatoacetate and some derived pyrrolo[3,2-d]pyrimidines related to the cytokinins creason. Stephen: Shaw, Gordon Sch. Chem. Univ. Bradford, Bradford, BD7 1DP, UK Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) { 1985), (1), 187-90 CODEN: JCPR4: ISSN: 0300-922X Journal English CASREACT 103:104907

AUTHOR(S): CORPORATE SOURCE: SOURCE:

CODEN: JCPRB4; ISSN: 0300-922X

DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(\$): CASREACT 103:104907

R1: RCT (Reactant); SPN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent)
(preparation and decarboxylation of)
RN 97760-08-2 CAPIUS
CN 5H-Pyrcolo(3, 2-d]pyrimidine-7-carboxylic acid, 6-hydroxy-4-(methylamino)-, ethyl ester (9CI) (CA INDEX NAME)

AB Reaction of chloropyrimidine I (R = C1) with RICH2CO2Et (R1 = CO2Et, CN, COMe) in Me2CO containing aqueous NaOH at room temperature for 30 min gave pyrimidines I (R = CHRICO2Et, R1 as before) which on Pd/C-catalyzed hydrogenation in EtOH gave aminopyrimidines II (R1 as above). Cyclization of these compds. under various conditions gave pyrrolopyrimidine derivs. E.g., treatment of II (R1 = CO2Et) with Na2CO3 in H2O at apprx.100° gave III.

L16 ANSWER 46 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
DOCUMENT NUMBER:
103:37449
TITLE:
Further studies on the ring transformation of
pyrimido[5,4-e]-as-triazine 4-oxides to
pyrrolo[3,2-d]pyrimidines involving 1,3-dipolar
cycloaddition reaction
AUTHOR(S):
Kanazava, Hashime: Ichiba, Misuzu; Shimizu, Nobuyuki;
Tamura, Zenzo: Senga, Keitazo
CORPORATE SOURCE:
Sch. Med., Keio Univ., Tokyo, 160, Japan
Journal of Organic Chemistry (1985), 50(14),
2413-16
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE:
JOURNAL OF JO

96429-56-0 CAPLUS 1H-Pyrrolo(3,2-d)pyrimidine-7-carboxylic acid, 5-benzoyl-6-(4-chlorophenyl)-2,3,4,5-tetrahydro-1,3-dimethyl-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

96429-57-1 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid, 5-benzoyl-2,3,4,5-

L16 ANSWER 46 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) tetrahydro-1,3-dimethyl-6-(4-methylphenyl)-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

96429-58-2 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid, 5-benzoyl-2,3,4,5-tetrahydro-1,3-dimethyl-6-(4-nitrophenyl)-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

96429-59-3P 96429-60-6P 96429-61-7P 96429-62-8P 96429-63-9P 96429-64-0P 96429-65-1P RL: 5PN (Synthetic preparation); PREP (Preparation)

(preparation of)
96429-59-3 CAPRUS
HH-Pyrcolo[3,2-d]pyrimidine-7-carboxylic acid, 2,3,4,5-tetrahydro-1,3,6-trimethyl-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

1.16 ANSWER 46 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

96429-64-0 CAPLUS IH-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid, 2,3,4,5-tetrahydro-1,3-dimethyl-6-(4-nitrophenyl)-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

96429-53-7P 96429-55-9P
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent) (preparation, hydrolysis, and crystal structure of)
96429-53-7 CAPLUS
HR-Pycrolo[3,2-d]pyrimidine-7-carboxylic acid, 5-benzoyl-2,3,4,5-tetrahydro-1,3,6-trimethyl-2,4-dioxo-, ethyl ester (9C1) (CA INDEX NAME)

L16 ANSWER 46 OF 60 CAPLUS COPYRIGHT 2007 ACS OD STN (Continued)

96429-50'6 CAPLUS HH-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid, 6-ethyl-2,3,4,5-tetrahydro-.1,3-dimethyl-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

96429-61-7 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid, 2,3,4,5-tetrahydro-1,3-dimethyl-2,4-dioxo-6-phenyl-, ethyl ester (9CI) (CA INDEX NAME)

96429-62-8 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid, 6-(4-chlorophenyl)-2,3,4,5-tetrahydro-1,3-dimethyl-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

96429-63-9 CAPLUS
1H-Pyrcolo[3,2-d]pyrimidine-7-carboxylic acid, 2,3,4,5-tetrahydro-1,3-dimethyl-6-(4-methylphenyl)-2,4-dioxo-, ethyl ester (9CI) (CA INOEX NAME)

L16 ANSWER 46 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

96429-55-9 CAPLUS
IH-Pyrcolo[3,2-d]pyrimidine-7-carboxylic acid, 5-benzoyl-2,3,4,5tetrahydro-1,3-dimethyl-2,4-dioxo-6-phenyl-, ethyl ester (9CI) (CA INDEX

GI

The reaction of 3-alkyl(or aryl)pyrimidotriazinedione oxides I [R = Me, Et, 4-RlC6H4 (RI = H, Cl, Me, NO2)] with PhC.tplbond.CCO2Et in PhMe gave the unexpected pyrcolopyrimidinediones II. The structures of II were supported by spectral data as well as by chemical means and were confirmed

Page 132

L16 ANSWER 46 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) single-crystal x-ray diffractions. On the other hand, the reaction of I (R = H) with PhC.tplbond.CCO2Et yielded pyrrolopyrimidinedioneIII.

L16 ANSWER 47 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN NAME) (Continued)

85143-80-2 CAPLUS 
1H-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid, 6-[(4-chlorophenyl)amino]-2,3,4,5-tetrahydro-1,3-dimethyl-2,4-dioxo-, methyl ester (9CI) (CA INDEX

85143-81-3 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid, 2,3,4,5-tetrahydro-1,3-dimethyl-6-[(4-methylphenyl)amino]-2,4-dioxo-, methyl ester (9CI) (CA

85143-82-4 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid, 2,3,4,5-tetrahydro-6-[(4-methoxyphenyl)amino]-1,3-dimethyl-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 47 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1983:143378 CAPLUS
DOCUMENT NUMBER: 98:143378
A new synthesis of pyrimido{5,4-e}-as-triazine
4-oxides and their ring transformation to
pyrcolo(3,2-d)pyrimidines
Nishigaki, Sadao: Kanazawa, Hashime: Kanamori, Yukako:
Ichiba, Misuzur, Senga, Keitaro
CORPORATE SOURCE: Sch. Med., Keio Univ., Tokyo, 160, Japan
Journal of Heterocyclic Chemistry (1982),
19(6), 1309-12
CODEN: JHTCAD: ISSN: 0022-152X

CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): English

OTHER SOURCE(S): CASKEACT 98:143378

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and saponification-decarboxylation of)

RN 85143-78-8 CAPLUS

CN 1H-Pycrolo[3,2-d]pytimidine-7-carboxylic acid, 2,3,4,5-tetrahydro-1,3-dimethyl-2,4-dioxo-6-(phenylamino)-, methyl ester (9CI) (CA INDEX NAME)

85143-83-5 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid, 2,3,4,5-tetrahydro-1,3-dimethyl-2,4-dioxo-6-(phenylamino)-, ethyl ester (9CI) (CA INDEX NAME)

85143-79-9P 85143-80-2P 85143-81-3P 85143-82-4P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of) 85143-79-9 CAPUS HR-Pyrrolo[3, 2-d]pyrimidine-7-carboxylic acid, 6-[(4-bromophenyl)amino]-2,3,4,5-tetrahydro-1,3-dimethyl-2,4-dioxo-, methyl ester (9CI) (CA INDEX

L16 ANSWER 47 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

Reaction of 6-hydrazino-1,3-dimethyluracil with HC(OEt)3 gave (ethoxymethylenehydrazino)dimethyluracil I, which was treated with arylamines to give (arylaminomethylenehydrazino)dimethyluracils II (R = H, Br, Cl, Me, MeO). Nitrosative cyclization of II with NaNO2 afforded arylaminofervenulin oxides III. Reaction of III with acetylenic esters yielded dimethylpyrrolopytimidinediones IV (RI = Me, Et).

L16 ANSWER 48 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1983:4515 CAPLUS
S9:4515
AUTHOR(S): Senga, Keitaro: Fukami, Kiyoko: Kanazawa, Hashime:
Nishigaki, Sadao
CORPORATE SOURCE: SOURCE: Journal of Heterocyclic Chemistry (1982), 19(4), 805-8
CODEN: JHTCAD; ISSN: 0022-152X
JOURNAL

DOCUMENT TYPE: Journal English LANGUAGE:

SUAGE: English

83848-77-5P

RL: SPN (Synthetic preparation), PREP (Preparation)
(preparation of)

83848-77-5 CAPUS

H-Pyrrolo[3,2-d]pyrimidine-7-carboxaldehyde, 2,3,4,5-tetrahydro-1,3-dimethyl-2,4-dioxo-6-phenyl- (9CI) (CA INDEX NAME)

New synthetic routes to pyrido(3,2-d)pyrimidines starting with 5-amino-1,3,6-trimethyluracii (I) or 1,3,6-trimethyl-5-nitrouracii (II) are described. Thus, condensation of I with arylaldehydes gave 5-arylideneamino-1,3,6-trimethyluracils, which upon heating with MeXNCH(ONE) afforded the pyridopyrimidinediones III (R = (un)substituted phenyl] via 5-arylideneamino-1,3-dimethyl-6-(2-dimethylaminovinyl)uracils. Reaction of II with PhCH2CHO in the presence of base yielded III (R = Ph) and its 5-oxide.

L16 ANSWER 49 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

82734-37-0 CAPLUS
4H-Pyrrolo[3,2-d]pyrimidin-4-one, 7-[(diethylamino)methyl]-1,5-dihydro-2,6-dimethyl-,monohydrochloride (9C1) (CA INDEX NAME)

GI

The title compds. I (R = Et2N, Rl = R3 = H, Me, R2 = OH: R = piperidino, Me2N, Rl = R3 = Me, R2 = Me) were prepared in 42-75% yields by Mannich reactions of the appropriate pyrrolopyrimidines with RH. I (R = BuNH (II), 1-cyclohexen-1-ylethylamino (III) Rl = Me, R2 = OH, R3 = H: R = BuNH, Rl = Ph, R2 = Cl, R3 = H: R = 1-cyclohexen-1-ylethylamino, R1 = Ph, R2 = OH, 1-cyclohexen-1-ethylamino, R3 = H| were prepared in 30-93% yields by condensing the amines with pyrrolopyrimidinecarboxaldehyde to give Schiff bases which were reduced by NaBH4. II and III inhibited dihydrofolate reductase activity 82 and 95%, resp., at 10-5M concns.

L16 ANSWER 49 OF 60 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1982:492226 CAPLUS DOCUMENT NUMBER: 97:92226

97:92226
Pyrrolo(3,2-d)pyrimidine derivatives. III.
7-Aminomethyl-substituted pyrrolo(3,2-d)pyrimidines
Modnikova, G. A.; Sizova, O. S.; Novitskii, K. Yu.;
Ryabokon, N. A.; Vlasova, T. M.; Chenovo, V. A.
Vses. Nauchno-Issled. Khim.-Farm. Inst., Moscow, USSR
Khimiko-Farmsteevticheskii Zhurnal (1982),
16(5), 548-52
CODEN: KHFZAN; ISSN: 0023-1134
Journal
Russian AUTHOR(S):

CORPORATE SOURCE: SOURCE:

OCUMENT TYPE:
Journal
LANGUAGE: Russian
OTHEM SOURCE(S): CASREACT 97:92226
TRUSTAND STATE STATE

56/12-03-0 CARDIS
58H-Pyrrolo[3,2-d]pyrimidine-7-methanamine; 4-methoxy-N,N,2,6-tetramethyl-,
compd. with 2,4,6-trinitrophenol (1:1) (9CI) (CA INDEX NAME)

82722-82-5 C12 H18 N4 O

CM 2

88-89-1 C6 H3 N3 O7

L16 ANSWER 50 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1981:462120 CAPLUS DOCUMENT NUMBER: 95:62120

TITLE:

95:62120
1,3-Dipolar cycloaddition of a thiazolo[5,4-d]pyrimidine 1-oxide to dimethyl acetylenedicarboxylate. New ring transformation to a pyrrolo[3,2-d]pyrimidine via a pyrimido[4,5-b][1,4]thiazine
Senga, Keitaro: Ichiba, Misuzu; Kanazawa, Hashime; Nishigaki, Sadao
Pharm. Inst., Keio Univ., Tokyo, 160, Japan Journal of the Chemical Society, Chemical Communications (1981), (6), 278-80
CODEN: JCCCAT; ISSN: 0022-4936
Journal

AUTHOR (5): CORPORATE SOURCE:

DOCUMENT TYPE: English LANGUAGE:

IT 71411-49-9P

71411-49-9P
RL: SPN (Synthetic preparation): PREF (Preparation)
(preparation of, by ring contraction of pyrimidothiazine)
71411-49-9 CAPUS
HI-Pyrcnolo[3,2-d]pyrimidine-6,7-dicarboxylic acid, 2,3,4,5-tetrahydro-1,3-dimethyl-2,4-dioxo-, dimethyl ester (9CI) (CA INDEX NAME)

GΙ

1.3-Bipolar cycloaddn. of thiazolopyrimidine oxide I with MeOZCC.tplbond.CCO2Me in refluxing MeOH for 10 h gave 38% pyrimidothiazine It and 17% pyrrolopyrimidine III, in addition to a small amount of

L16 ANSWER 50 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) thiobarbituric acid. The proposal that III is formed from II was proved by refluxing II in MeOH for 3 h to give 75% III.

L16 ANSWER 51 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

74366-94-2 CAPLUS SH-Pyriolo(3,2-d)pyrimidine-7-carboxylic acid, 4,6-diamino-, ethyl ester (9CI) (CA INDEX NAME)

(Continued)

74366-96-4 CAPLUS 5H-Pyrrolo(3,2-d)pyrimidin-4-amine, 6-ethyl-7-methyl- (9CI) (CA INDEX NAME)

AB Treating 7-(acylamino)furazano[3,4-d]pyrimidines (e.g., I) with enamines Page 135

L16 ANSWER 51 OF 60
ACCESSION NUMBER:
DOCUMENT NUMBER:
1980:568223 CAPLUS
93:168223
Synthesis of pyrrolo[3,2-d]pyrimidines from
furazano[3,4-d]pyrimidines via enolate and ene adducts
Crane, L. Eric: Beardsley, G. Peter Maki, Yoshifumi
Dep. Chem., Princeton Univ., Princeton, NJ, 08540, USA
3827-31
CODEN: JOURAL JESN. 0022-3263

3827-31
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: JOURNAL
LANGUAGE: English
OTHER SOURCE(S): CASREACT 93:168223
IT 74366-99-5P 74366-92-0P 74366-93-1P
74366-94-2P 74366-96-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 74366-98-5 CAPLUS
CN 5H-Pyrrolo(3,2-d)pyrimidine-7-carboxylic acid, 4,6-diamino-2-(methylthio)-, methyl ester (9CI) (CA INDEX NAME)

74366-92-0 CAPLUS Ethanone, 1-(4-amino-6-methyl-5H-pyrcolo[3,2-d]pyrimidin-7-yl)- (9CI) (CA INDEX NAME)

74366-93-1 CAPLUS 5H-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid, 4-amino-6-methyl-, ethyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 51 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) and enolates gave intermediates for unequivocal transformation into pyrcolo[3,2-d]pyrimidines (e.g., II and III).

L16 ANSWER 52 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1979:611369 CAPLUS DOCUMENT NUMBER: 91:211369

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

ACCESSION NUMBER: 1979:611369 CAPLUS
DOCUMENT NUMBER: 91:211369

TITLE: 89 synthesis of pyrrolo[3,2-d]pyrimidines
(9-dearapurines) by the 1,3-dipolar cycloaddition ceaction of fervenulin 4-oxides with acetylenic esters
CORPORATE SOURCE: Senga, Reitero: Ichiba, Misuzu; Nishigaki, Sadao
Sch. Med., Keio Univ., Tokyo, 150, Japan
Journal of Organic Chemistry (1979), 44(22),
3830-4
CODEN: JOCEH; ISSN: 0022-3263

DOCUMENT TYPE: Journal English
English
Tit 67775-83-1P 67812-61-7P 71411-49-9P
71411-50-2P 71411-51-3P 71411-52-4P
71411-50-2P 71411-61-5P
RL: SSN: (Synthetic preparation); PREP (Preparation)
(preparation of)
RN: 67775-83-1 CAPLUS
CN: 1H-Pycrolo[3,2-d]pyrimidine-7-carboxylic acid, 6-ethyl-2,3,4,5-tetrahydro-1,3-dimethyl-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)

67812-61-7 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid, 2,3,4,5-tetrahydro-1,3,6-trimethyl-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)

71411-49-9 CAPLUS HH-Pyrrolo[3,2-d)pyrimidine-6,7-dicarboxylic acid, 2,3,4,5-tetrahydro-1,3-dimethyl-2,4-dioxo-, dimethyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 52 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

71411-53-5 CAPLUS
HH-Pyrcol(3,2-d)pyrimidine-7-carboxylic acid, 6-formyl-2,3,4,5-tetrahydro-1,3,5-trimethyl-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)

71411-56-8 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid, 2,3,4,5-tetrahydro-1,3-dimethyl-2,4-dioxo-6-phenyl-, methyl ester (9CI) (CA INDEX NAME)

71411-59-1 CAPUS
1H-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid, 2,3,4,5-tetrahydro-1,3,5,6-tetramethyl-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)

Page 136

L16 ANSWER 52 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

71411-50-2 CAPLUS
1H-Pyrrolo[3,2-d]pyrimidine-6,7-dicarboxylic acid, 2,3,4,5-tetrahydro1,3,5-trimethyl-2,4-dioxo-, dimethyl ester (9CI) (CA INDEX NAME)

71411-51-3 CAPLUS
1H-Pyrrolo(3,2-d)pyrimidine-7-carboxylic acid, 6-formyl-2,3,4,5-tetrahydro1,3-dimethyl-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)

71411-52-4 CAPLUS lH-Pyrrolo[3,2-d]pyrimidine-6-acetic acid, 2,3,4,5-tetrahydro-7-(methoxycarbonyl)-1,3,5-trimethyl- $\alpha$ ,2,4-trioxo-, methyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 52 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 71411-60-4 CAPLUS
CN | H-Pyrcolo[3,2-d]pyrimidine-7-carboxylic acid, 6-ethyl-2,3,4,5-tetrahydro1,3,5-trimethyl-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)

71411-61-5 CAPLUS 1H-Pyrrolo(3,2-d)pyrimidine-6-acetic acid, 2,3,4,5-tetrahydro-7-(methoxycarbonyl)-1,3-dimethyl-a,2,4-trioxo-, methyl ester (9CI) (CA INDEX NAME)

1,3-Dipolar cycloaddn. reaction of fervenulin 4-oxides I (R = Ph, Me, Et, H) with MeOZCC tpibond.CCO2Me and HC. tpibond.CCO2Me gave a variety of pyrrolof3,2-d]pyrimidines (9-deazapurines) in a new synthetic route.

L16 ANSWER 53 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1979:87179 CAPLUS

DOCUMENT NUMBER: 90:87179

Intramolecular reactions of enaminonitriles. A new synthesis of β-aminopyrroles and related heterocycles

AUTHOR(S): Murata, Tadakazu; Sugawara, Tohtu; Ukawa, Kiyoshi

CORPORATE SOURCE: Cent. Res. Div., Takeda Chem. Ind., Ltd., Osaka, Japan Chemical & Pharmaceutical Bulletin (1978), 26(10), 3080-100

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal

LANGUAGE: GASREACT 90:87179

CHEN SOURCE(S): CASREACT 90:87179

To 1618-12-97 51618-13-4P 51618-14-5P

S1618-15-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

Qrepacation of)

(preparation of)
51618-12-3 CAPUUS
318-Pyrrclo[3,2-d]pyrimidine-7-carboxylic acid, 4,5-dihydro-3,6-dimethyl-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)

51618-13-4 CAPLUS
3H-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid, 4,5-dihydro-2,3,6-trimethyl-4-oxo-, ethyl ester (9C1) (CA INDEX NAME)

51618-14-5 CAPLUS .

1M-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid, 2,3,4,5-tetrahydro-3,6-dimethyl-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

1.16 ANSWER 53 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) L16 ANSWER 53 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

CAPLUS

HH-Pyrrolo(3,2-d)pyrimidine-7-carboxylic acid, 2,3,4,5-tetrahydro-3,6-dimethyl-4-oxo-2-thioxo-, ethyl ester (9CI) (CA INDEX NAME)

GI

Several new β-aminopyrcoles, β-aminoindoles, pyrido[3,4-b]indoles, and pyrrolo[3,2-b]pyridines were prepared by a sequence of reactions involving intramol, addition of an enamine to a cyano group. Enamine 1, prepared from tert-butylaminocyanoacetate and 1,3-cyclohexanedione, cyclized after substitution of the methine by £t bromoacetate in the presence of NaO£t to afford 2-tert-butoxycarbonyl-2-ethoxycarbonylmethyl-3-imino-4-oxo-4,5,6,7-tetrahydroindoline. Reaction of I with Me vinyl ketone-sodium ethoxide furnished 3-amino-2-tert-butoxycarbonyl-4-oxo-4,5,6,7-tetrahydroindole. Similarly certain 3-aminopyrroles and pyrrolo[3,2-b]pyridines were prepared from £to2CCH-(MeMHCH(CN)COZMe2 (II) prepared from acetoacetate and tert-Bu aminocyanoacetate. Enamines obtained by condensation of £t acetoacetate with aminocyanoacetamides underwent cyclizations to 3-amino-2-carbamoylpyrroles upon treatment with base. Several new 3-amino-pyrroles thus prepared were converted to new pyrrolo[3,2-d] and pyrrolo[3,4-d] pyrimidines. A steric effect of the neighboring butoxycarbonyl group in II was also briefly discussed.

L16 ANSWER 54 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
DOCUMENT NUMBER:
1978:546866 CAPLUS
89:146866
The 1,3-dipolar cycloaddition reaction of fervenulin
4-oxides with dimethyl acetylemedicarboxylate, a novel
synthesis of pyrcolo[3,2-d]pyrimidines
(9-deazapurines)
AUTHOR(S):
CORPORATE SOURCE:
CORPORATE SOURCE:
Heterocycles (1978), 9(7), 793-5
COODEN: HTCYAN: ISSN: 0385-5414
DOCUMENT TYPE:
LANGUAGE:
English
TO 67775-83-1 CPR 12-61-7P
RL: SPN (Synthetic preparation): PREP (Preparation)
(preparation of)
R67775-83-1 CAPLUS
CN 1H-Pyrcolo[3,2-d]pyrimidine-7-carboxylic acid, 6-ethyl-2,3,4,5-tetrahydro1,3-dimethyl-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)

67812-61-7 CAPLUS 1H-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid, 2,3,4,5-tetrahydro-1,3,6-trimethyl-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)

Pyrrolopyrimidinediones I (R = H, Me, Et) were obtained in 55-641 yields by cycloaddn. of MeO2CC.tplbond.CCO2Me to the corresponding fervenulin

L16 ANSWER 54 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 4-oxides. The structure of I (R = H) was confirmed by methylation with Me2NCH(OMe)2 to give the known 5-Me deriv.

L16 ANSWER 55 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN

66127-49-9 CAPLUS

H-Pyrcolo[3,2-d]pyrimidine-2,4(3H,5H)-dione, 7-methyl-6-phenyl-1,3-bis(phenylmethyl)- (9CI) (CA INDEX NAME)

(Continued)

GI

Pycrolopyrimidinediones I (R = H, Me, CH2Ph; R1 = Me, Ph, 4-O2NC6H4, 4-MeOC6H4; R2 = H, Me, Ph) were obtained in 70-80h yield by thermal S extrusion from II. The 7-di-Me analogs of II (R = H, Me, R1 = R2 = Me) did not undergo the S extrusion. II were obtained by treating 6-thiouramils with halo compds.

L16 ANSWER 55 OF 60
ACCESSION NUMBER:
DOCUMENT NUMBER:
1717LE:
40 Jene 22 Jene 22 Jene 22 Jene 24 Jene 24 Jene 25 Jene 27 Jene 88:152556
9-Deazapurines from pyrimido(4,5-b){1,4}thiazines
Fenner, Helmut; Motschall, Annegrete
Inst. Pharm., Freie Univ. Berlin, Berlin, Fed. Rep.

Ger. Archiv Germany) (1978), 311(2), 153-61 CODEN: ARPMAS; ISSN: 0365-6233 Journal SOURCE:

DOCUMENT TYPE:

LANGUAGE:

OTHER SOURCE(S):

MENT TYPE: Journal
UAGE: German
TR SOURCE(s): CASRACT 88:152556
66127-44-4P 66127-48-8P
66127-49-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
66127-44-4 CAPLUS
1H-Pycrolo(3, 2-d) pycimidine-2, 4(3H, 5H) -dione, 1,3,6,7-tetramethyl- (9CI)
(CA INDEX NAME)

66127-47-7 CAPLUS 1H-Pyrcolo[3,2-d]pyrimidine-2,4(3H,5H)-dione, 7-methyl-6-phenyl- (9CI) (CA INDEX NAME)

66127-48-9 CAPLUS HH-Pyrrolo[3,2-d]pyrimidine-2,4(3H,5H)-dione, 1,3,7-trimethyl-6-phenyl-[9C1) (CA INDEX NAME)

L16 ANSWER 56 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1974:95872 CAPLUS DOCUMENT NUMBER: 80:95872

DOCUMENT NUMBER: TITLE:

80:95872
Intramolecular reactions of enaminonitriles. II.
Synthesis of new 3-aminopyrrole-2-carboxamides. New
route to pyrroloj3,2-djpyrimidnines
Murata, Tadakazu; Ukawa, Kiyoshi
Cent. Res. Div., Takeda Chem. Ind., Ltd., Osaka, Japan
Chemical & Pharmaceutical Bulletin (1974),
22(1), 240-1
CODEN: CPBTAL, ISSN: 0009-2363
Journal AUTHOR(S): CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE: Journal

JOURNAL TYPE: JOURNAL LANGUAGE: English
IT 51618-12-3P 51618-13-4P 51618-14-5P
51618-15-6P
RL: SPM (synthetic preparation); PREP (Preparation)
(preparation of)
RN 51618-12-3 CAPLUS
CN 3H-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid, 4,5-dihydro-3,6-dimethyl-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)

Si618-13-4 CAPLUS
3H-Pyrcolo[3,2-d] pyrimidine-7-carboxylic acid, 4,5-dihydro-2,3,6-trimethyl-4-oxo-, ethyl ester (9C1) (CA INDEX NAME)

51618-14-5 CAPLUS
1H-Pyrrolo{3,2-d}pyrimidine-7-carboxylic acid, 2,3,4,5-tetrahydro-3,6-dimethyl-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 56 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

S1618-15-6 CAPLUS : IN-Pyrcolo[3,2-d]pyrimidine-7-carboxylic acid, 2,3,4,5-tetrahydro-3,6-dimethyl-4-oxo-2-thioxo-, ethyl ester (9CI) (CA INDEX NAME)

For diagram(s), see printed CA Issue. 3-Aminopycroles I [R=RI=H:R=He,RI=H:RRI=(CH2)5] were prepared in 30-751 yields by cyclizing Eto2CCH:CMeNHC(CN)CONRRI with EtoNa in EtoNi. I were readily converted to the pycrolo[3,2-d]pycimidines II and III (X=0,S) by treating with suitable reagents. Treating I [R=Me,RI=H] with NaNo2 in aqueous HCI gave the pycrolotriazine IV.

L16 ANSWER 58 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1964:484243 CAPLUS DOCUMENT NUMBER: ORIGINAL REFERENCE NO.: TITLE:

61:94243 61:14671g-h,14672a Chemical structure of albomycin. VIII. Transformations associated with the presence of pyrimidine base in the

albomycin molecule Lavrenova, G. I.; Poddubnaya, N. A. M. V. Lomonosov State Univ., Moscow Thurnal Obshchei Khimii (1964), 34(9), 2864-8 AUTHOR (S) : CORPORATE SOURCE: SOURCE:

CODEN: ZOKHA4: ISSN: 0044-460X

DOCUMENT TYPE:

LANGUAGE: Russian IT 98562-99-3 98638-93-8

98582-99-3 98638-93-8
(Derived from data in the 7th Collective Formula Index (1962-1966))
98562-99-3 CAPLUS
[6-Carbow-2, 4-diethoxy-5H-pyrrolo[3, 2-d] pyrimidin-7yl) methyl|trimethylammonium iodide, ethyl ester (7CI) (CA INDEX NAME)

98638-93-8 CAPLUS 5H-Pyrrolo[3,7-d]pyrimidine-6-carboxylic acid, 7-[(dimethylamino)methyl)-2,4-diethoxy-; ethyl ester (7CI) (CA INDEX NAME)

For diagram(#), see printed CA Issue. cf. CA 60, 1750d, 1976q. The active fraction  $\lambda$ -2 of albomycin was hydrolyzed 2 hrs. at 90 with saturated aqueous Ba(OH) 2. The solution was acidified with H2SO4, the BaSO4 filtered off, and the filtrate evaporated

ultraviolet spectrum, chromatographic and electrophoretic behavior, and Ac derivative identify the residue as  $2\text{-}oxo-6\text{-}methylaminopyrimidine}$  (I).

L16 ANSVER 57 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1973:147895 CAPLUS
TILLE: P\$147895 CAPLUS
TILLE: P\$147895 CAPLUS
TILLE: SOKOLOVA, V. N.; Modnikova, G. A.; Magidson, O. Yu.; Shcherbakova, L. I.; Pershin, G. N.; Zykova, T. N.
CORPORATE SOURCE: Vses. Nauchno-Issled. Khim.-Farm. Inst. im.
Ordzhonikidze, Moscow, USSR
Khimiko-Farmatsevticheskii Zhurnal (1973), 7(3), 19-24
CODEN: KHEZAN; ISSN: 0023-1134
JOURNAL DOCUMENT TYPE:

DOCUMENT TYPE:

For diagram(a), see printed CA Issue.
Pycrolo[3,2-d]pycimidines (1: R = ELZnCH2CH2NH, PhCH2NH, PhCH2CH2NH,
4-methyl-1-piperazinyl), II, III, and IV were prepared in 29-911 yields by
treatment of (R = C1) with the appropriate amine. Alkoxy derivs. (1: R =
MeO, ECO, BLO, ELZNCH2CH2O) were obtained in 23-644 yields by treatment of
I (R = C1) with RONa in ROH. Alkylthio derivs. [1: R = Bus, Me2CHCH2S,
Me(CH214-7CH2S NCCH2S, CH2:CHCH2S, HC:CCH2S, PhCH2S, P-CLC6- h4CH2S] were
prepared in 25-74% yields by alkylaton of I (R = SH) by RBC.

L16 ANSWER 59 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1964:484242 CAPLUS
OCCUMENT NUMBER: 61:84242
ORIGINAL REFERENCE NO.: 61:14670h,14671a-g

DOCUMENT NUMBER: 61:84242
ORIGINAL REFERENCE NO: 61:1670h, 1467la-g
Nucleic acid antagonists. VII. Synthesis and characterization of 1,4,6-triazaindenes
(5H-pyrrolo[3,2-d]pyrimidines)

AUTHOR(S): Imai, Kinichi
Takeda Chem. Ind., Ltd., Osaka, Japan
Chemical & Pharmaceutical Bulletin (1964),
12(9), 1030-42
CODEN: CPBTAL: ISSN: 0009-2363
JOURNET TYPE: Journalle
LANGUAGE: Unavailable
Unavailable
Unavailable
(5H-pyrrolo[3,2-d]pyrimidin-7-yl)methyl]trimethyl, iodide, Et ester 98638-93-BP,
2,4-diethoxy-, ethyl ester
RL: PREP (Preparation)
(preparation of)
RN 98562-99-3 CAPUUS
CN [(6-Carboxy-2,4-diethoxy-5H-pyrrolo[3,2-d]pyrimidin-7-yl)methyl]trimethylammonium iodide, ethyl ester (7CI) (CA INDEX NAME)

98638-93-8 CAPLUS 5H-Pyrrolo[3,2-d]pyrimidine-6-carboxylic acid, 7-[(dimethylamino)methyl]-2,4-diethoxy-, ethyl ester (7CI) (CA INDEX NAME)

For diagram(s), see printed CA Issue.

2-Carbethoxy-5,7-diethoxy-1,4,6-triazaindene (I) (2 g.) and 10 cc. HCl refluxed 6 h. gave 1.3 g. 2-Co2Ed derivative (II) of 5,7-dioxo-4,5,6,7-tetrahydro-1,4,6-triazaindene (III), m. above 360° (H2O). II (1 g.) and 100 mg. Cu powder heated at 330-d0' until the CO2 evolution ceased gave 600 mg. III, m. above 360° (H2O). I (1 g.) and 500 mg. Cu powder heated 10 min. in vacuo at 220-d0' yielded 700 mg.

2-CO2Et derivative (IV) of 4,6-diethyl-5,7-dioxo-4,5,6,7-tetrahydro-1,4,6-diethyl-5,7-dioxo-4,5,6,7

10524995.trn

116 ANSWER 59 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) triazene (V), m. 205' (aq. EtOH). IV (840 mg.) in 15 cc. EtOH heated 2 h. on the water bath with 1.5 g. NaOH in 2 cc. H2O gave 700 mg. 2-COZH deriv. (VI) of V, m. 306' (MeOH). VI (150 mg.) heated at 310-20' during 10 min. yielded 100 mg. V, m. 142' (repptd. from CoH6 with petr. ether). IV (300 mg.), 5 cc. EtOH, and 3 cc. 28' MH4OH heated 5 h. in a sealed tube at 140-50' gave 200 mg. 2-CONN2 deriv. of V. cryxtal powder, m. 298' (aq. EtOH). 5-Me deriv. (VII) (4.7 g.) of 2-methyl-7-oxo-6,7-dihydro-1,4,6-triazaindene (VIII) (4.7 g.) of 2-methyl-7-oxo-6,7-dihydro-1,4,6-triazaindene (VIII) (4.7 g.) of 2-methyl-7-oxo-6,7-dihydro-1,4,6-triazaindene (VIII) (5.9.) and 24 cc. POC13 gave similarly 4 g. X, m. 178' (decompn.). III (5 g.), and 24 cc. POC13 gave similarly 4 g. X, m. 178' (decompn.). III (5 g.), and 24 cc. pycophosphocyl chloride (upper layer of a mixt. prepd. by heating POC13 with 0.5 equiv. H2O 1.5 h.) yielded 2.1 g. XI, m. 25-8' (aq. MeOH). 7-Oxo-6,7-dihydro-1,4,6-triazaindene (XII), m. 186-8' (decompn.) 5 (aq. EtOH). XI (3 g.) and 30 cc. 2N (MOH refluxed 4.5 h. yielded 1.6 g. 5-C1 deriv. (XIV) of XIII. m. 270' (decompn.) H2O. XI (500 mg.) and 40 og. C5 (MH2) Xi n. 13 cc. EtOH cefluxed 5 h. yase 250 mg. 30 deriv. (XIV) of XIII. m. 270' (decompn.) H2O. XI (500 mg.) and 400 mg. C5 (MH2) Xi n. 13 cc. EtOH cefluxed 5 h. yase 250 mg. 30 deriv. (XIV) of XIII. m. 270' (decompn.) H2O. XI (500 mg.) and 400 mg. C5 (CH2) XIII m. 200-5' gave 150 mg. XV. XV (700 mg.) and 50 cc. EtOH refluxed 4 h. pix ledde 100 mg. 7. mercapto-1,4,6-triazaindene (XIVI) and A. at 200-5' gave 150 mg. XV. XV (700 mg.) and 50 cc. EtOH refluxed 4 h. pix ledde 100 mg. 7. mercapto-1,4,6-triazaindene (XVII), pale yellow needles, m. above 300' (H2O). VII (700 mg.), 3.8 g. P255. and 16 cc. Tetralin heated 12 h. at 190-200' gave 2.5-dimethyl-7-mercapto-1,4,6-triazaindene (XVII), pale yellow needles, m. above 300' (H2O). VII (700 mg.), 314-15' (decompn.) [300 mg.] (300 mg.

L16 ANSWER 60 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1955:73579 CAPLUS DOCUMENT NUMBER: 49:73579

DOCUMENT NUMBER: ORIGINAL REFERENCE NO.:

49:73579
49:14002b-i,14003a-i,14004a-b
1,2,4,6-Tetraazaindenes and 1,4,6-triazaindan-2-ones
from 5-aminopyrimidines
Rose, F. L.
Imperial Chem. Inds. Ltd., Manchester, UX
Journal of the Chemical Society (1954)
4116-26
CODEN: JCSOA9, 16811 0007

AUTHOR(S): CORPORATE SOURCE:

CODEN: JCSOA9: ISSN: 0368-1769

OCCUMENT TYPE: Journal
LANGUAGE: Journal
LANGUAGE: Journal
LANGUAGE: Journal
17 860721-15-9P, SH-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid,
2-amino-6.7-dihydro-4-methyl-6-oxo-, ethyl ester, hydrochloride
860721-17-1P, SH-Pyrrolo[3,2-d]pyrimidine-7-carboxylic acid,
4-dimethylamino-6,7-dihydro-2-methyl-6-oxo-, ethyl ester
RL: PREP (Preparation)

(preparation of)

860721-15-9 CAPLUS
5H-Pyrrolo[3], 2-d|pyrtmidine-7-carboxylic acid, 2-amino-6,7-dihydro-4-methyl-6-oxo-, ethyl ester, hydrochloride (SCI) (CA INDEX NAME)

HC1

860721-17-1 CAPLUS SH-Pyrrold[3,2-d]pyrimidine-7-carboxylic acid, 4-dimethylamino-6,7-dihydro-2-methyl-6-oxor, ethyl ester (SCI) (CA INDEX NAME)

For diagram(s), see printed CA Issue. cf. C.A. 47, 5403i. The formation of the 1,2,4,6-tetraazaindenes (I) through the diazotization of 5-amino-4-methylpyrimidines (II) was undertaken in order to prepare members of the series isosteric with the natural purines, and perhaps form a basis for new chemotherapeutic agents. 6-Me groups have been introduced into several 5-nitropyrimidines by substitution of a diethyl malonate radical for Cl, followed by degradative

L16 ANSWER 59 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

MeZNH, 1.5 cc. AcOH, and 440 mg. 37% aq. CH2O and the mixt. heated 2 h. on
the water bath and kept overnight yielded 500 mg. 3-MeZNCH2 deriv. (XXV)
of I, needles, m. 103-4\* (petr. ether). XXV (200 mg.), 2 cc. EtOH,
and 100 mg. MeI gave XXV.MeI, needles, m. 180\* (1:2 MeZCO-AcOEt).
The UV spectra of I, IV, VIII, XXIII, XXII, XXIII, XXIIV, XXIX, and
the dihydro deriv. of XXIV.HCl, and the IR spectrum of XXIV were recorded.

ANSWER 60 OF 60 CAPLUS COPYRIGHT 2007 ACS on STM (Continued) hydrolyses to yield intermediates not available by direct nitration. The following of the second content of the content of th

10524995.trn

116 ANSWER 60 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

m. 48-50°, reduced to di-Et 5-amino-2-chloro-6-methyl-4pyrimidinylpalonate (XI), m. 141°. Acidification of a refluxing
soln. of XI and Na2CO3 yielded a ppt. which on heating with H20 afforded
5-chloro-3-ethoxycarbonyl-7-methyl-1.4.6-triazaindan-2-one, decomp. above
200°. Prepd. as VIII was di-Et a-(2-chloro-6-methyl-5-nitro4-pyrimidinyl)-a-p-chlorophenylazomalonate (XII), from p-ClC6H4NH2
and XI, m. 98°. NaOH and XII in refluxing EtCH yielded Et
a-p-chlorophenylazo-a-(2-hydroxy-6-methyl-5-nitro-4pyrimidinyl)actate. m. 234°. V and 4.6-di.chloro-2-methyl-5nitropyrindinyl wielded di-Et a-(4-chloro-2-methyl-5-nitro-6pyrimidinyl)malonate (XIII), whose Ns salt m. 150-2°; a small amt.
b. 140-2°/0.01 mm. before violently decompg. XIII and MeZNH
afforded di-Et 6-dienthylamino-2-methyl-5-nitro-4-pyrimidinylmalonate, m.
89°. Reduction of XII in MeOH-Raney NI afforded di-Et
5-amino-4-chloro-2-methyl-6-pyrimidinylmalonate (XIV), m. 90°.
which on treatment with hot aq. Na2CO3 yielded 7-chloro-3-ethoxycarbonyl-5methyl-1,4,6-triazaindan-2-one (XV), decompd. on heating. XV, heated with
MeZNH, afforded. on neutralization, the 7-dimethylamino analog of XV, no.
m.p. XIII, refluxed with 4M RCl, and then evapd. to dryness, yielded
4-hydroxy-2,6-dimethyl-5-nitropyrimidine.
A,6-diploro-5-nitropyrimidine and V yielded di-Et
colonioloro-5-intropyrimidine and V yielded di-Et
colonioloro-5-intropyrimidine and V yielded di-Et
colonioloro-5-nitropyrimidine and V yielded di-Et
colonioloro-6-methyl-5-nitropyrimidine, Mas added to
4,6-dichloro-5-nitropyrimidine and V yielded di-Et
colonioloro-6-methyl-5-nitropyrimidine, m. 97°, which
on reduction with Raney Ni in MeOH yielded di-Et
colono-6-methyl-5-nitropyrimidine men animolo-6-methyl-5nitropyrimidine, m. 122-3°, which was reduced to the 5-amino analog

L16 ANSWER 60 OF 60 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) nitropycimidine, m. 198°. Addn. of Me2SO4 to the mercapto compd. afforded 4-benzylmethylamino-6-methyl-2-methylthio-5-nitropycimidine, m. 90°. Reduction with Raney Ni yielded the 5-amino analog which on treatment with Ac2O formed the 5-Ac deriv., m. 102°. NaNO2 added to a soln. of XIX in HCl was cooled in ice and NaI in H2O added to yield 2-dimethylamino-6-methyl-1',2',3'-triazolo[5',4',4,5]pyrimidine 1'-methiodide, decomp. 140°. XXI was reduced in BuoH with Raney Ni. AcOH and H2O were used to dissolve the diamine. The product, after filtration and concn. was diazotized with NaNO2 to yield 1,6-dife-dimethylamino-1',2',3'-triazolo[5',4',4,5]pyrimid-1'-yl]hexane, m. 183-4°.

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
FULL ESTIMATED COST	ENTRY 347.50	SESSION 525.66
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-46.80	-46.80

STN INTERNATIONAL LOGOFF AT 22:00:23 ON 31 AUG 2007